# Tacoma-Pierce County Health Department Environmental Health Code Chapter 3

# Water Regulations

4/1/2015

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# **SECTION 1: Purpose and Authority**

The Tacoma-Pierce County Board of Health (BOH) finds that the following rules and regulations are necessary to maintain health and sanitary measures governing water wells, and individual and public water systems that provide potable water. Nothing contained in these rules and regulations shall be construed to prevent the health officer from requiring compliance with higher standards than those contained in these rules and regulations where such higher public health standards are essential to maintain a safe and reliable source of potable drinking water, and be protective of public health.

- A. The purpose of these regulations is to protect the public's health by:
  - 1. Minimizing the public health risk from water systems that do not meet the minimum requirements for public water systems and their conveyance infrastructures, including water wells, piping, pumps, storage and treatment methods; and
  - 2. Minimizing the adverse affects to public health from the improper siting or construction of water wells; and
  - 3. Minimizing the adverse affects to public health and water resources from the improper management and operation of water systems and wells; and
  - 4. Setting conditions for the withdrawal or revocation of approvals, for the cessation of use of water systems and for the elimination of health hazards;
  - 5. Setting conditions of approval for integration with other water supply, land use, and sewage management plans and regulations of the Tacoma-Pierce County Health Department (Health Department); and
  - 6. Requiring all public and private individual water systems to meet the rules and regulations required by federal, state, and local regulation.
- B. These regulations control the location, design, installation, operation, maintenance, and monitoring of a water supply and water supply infrastructure to:
  - 1. Ensure that public water systems, public water system wells, individual water systems and individual wells provide a safe and reliable source of drinking water; and
  - 2. Minimize the potential public health risks associated with contaminated water sources and water supply, and water borne illnesses.
- C. It is the intent of this chapter to place the obligation of complying with its requirements upon the owner or operator of a private or public water system within its scope. No provision and no term used in this chapter is intended to impose any duty whatsoever upon the Health Department or any of its officers or employees, for whom the implementation or enforcement of this ordinance shall be discretionary and not mandatory.

D. These regulations are adopted by the Board of Health in accordance with the authority granted in RCW 70.05, RCW 70.119A.060, and RCW 18.104.043 to establish minimum requirements and public health standards for siting, construction, maintenance, and operation of public water systems and water wells.

# **SECTION 2: Administration**

- A. The health officer is authorized to adopt additional rules, policies, standards, or take such other action deemed necessary to carry out the purposes of this chapter in protecting drinking water supplies and systems, and the surface and ground water sources supplying those systems.
- B. The health officer may charge fees for the administration of this chapter pursuant to RCW 70.05.060.

## **SECTION 3: Definitions and Abbreviations**

All words used in this chapter shall have their common definition, as used in context, unless a specific definition is set forth herein. The definitions used in this chapter are intended to be used specific to this chapter and should not be used for defining words, terms, or phrases in any other chapter or section of the Environmental Health Code, unless specifically indicated otherwise in the text. Additional definitions of general application may be found in chapter 1 of the Environmental Health Code.

**Abandoned Well**: A well that is unused, unmaintained, or is in such disrepair that it is unusable or is a risk to public health or the environment.

**Accessory Dwelling Unit (ADU)**: A second dwelling unit, located on the same lot, attached to, or detached from, the principal dwelling; and meets the requirements of Pierce County Code Chapter 18A.35.080.

**Action Plan**: A plan created by a water system owner or manager that details the method and materials to be used to correct a water system operating violation, a public health hazard associated with the water system, or a water system component failure. The plan must include a time frame for completion.

**Adequate Water Supply**: A potable source of water supplied to a public gathering, single or multi-family residence, commercial business, industry, temporary event, or for the purpose of platting, that meets appropriate local, state and federal drinking water supply rules and regulations, including any approvals, fees and/or permits, pertaining to drinking water sources and the delivery of a safe and reliable supply of drinking water.

For a public water system, compliance with the monitoring, water quality, and engineering standards as required in federal, state and local drinking water regulations, and has demonstrated the technical, managerial, and financial capacity to provide a safe and reliable source of drinking water, as indicated in the original approved water system plan, or water system Design Manual, or approved amendments thereto, as adopted by the Health Department.

**Adult Family Home:** A residential home in which a person or persons provide personal care, special care, room, and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services.

**Adverse Impact**: A lowered water quality, decreased ability to withdraw water from the source, or other physical, chemical, or biological impacts that limit the use of the well or aquifer as a water source.

**Alternate Water Source**: A source of water that is not supplied by either an individual well or a public water system.

**ANSI:** The American National Standards Institute.

**Application**: Either the act of seeking a required approval or certification from the Health Department or the forms, format and supporting documentation required by the health officer to gain approval or certification.

**Approved:** The Health Department has determined that the activity, construction, or other action meets the current requirements of this chapter.

**ASME:** Means the American Society of Mechanical Engineers

**Authorized Agent**: Any person who:

- Makes decisions regarding the operation and management of a public water system whether or not he or she is engaged in the physical operation of the system;
- Makes decisions whether to improve, expand, purchase, or sell the system; or
- Has discretion over the finances of the system.

**Binding Site Plan (BSP)**: A land division process used to create lots or tracts classified for industrial or commercial uses pursuant to RCW 58.17.035 or residential condominiums pursuant to RCW 64.34, as defined by Pierce County Code.

**Boarding Homes**: Any home or other institution, however named, which is advertised, announced, or maintained for the express or implied purpose of providing housing, basic services, and assuming general responsibility for the safety and well-being of the residents, and as further defined in WAC 388-78A-2020.

**Boundary Line Adjustment (BLA):** Altering boundary lines between platted or unplatted lots, or both, which does not create any individual lot, tract, parcel, site, or division, nor create any lot, tract, parcel site, or division which contains insufficient area and dimension to meet minimum requirements for width and area for a building site, except as provided for in Chapter 18F.70 of the Pierce County Code.

**Campground or Camping Site**: A designated and posted camping facility encompassing two or more individual standard or utility campsites as defined in Chapter 352-32 WAC.

**Camping**: Erecting a tent or shelter or arranging bedding, or both, or parking a recreation vehicle or other vehicle for the purpose of remaining overnight.

**Camps:** An established group camp which is established or maintained for recreation, education, vacation, or religious purposes for use by organized groups and wherein these activities are conducted on a closely supervised basis.

**Capacity**: The ability of a water system to provide a safe and reliable source of potable drinking water to its current service connections and any future service connections defined in the water system plan. The evaluation of capacity includes, but is not limited to: system management and operation, financial viability, water system infrastructure, water supply source, and water quality.

**Certified Operator**: A water system operator meeting the requirements of the Washington State Department of Health for the operation of a public water system.

**Clustered Well:** More than one well located within a one hundred (100) foot radius, excluding a well field as defined in this chapter.

**Coliform Sample**: A sample of water collected from the distribution system at or after the first service and analyzed for coliform presence in compliance with this chapter.

**Commercial Business**: Businesses involved in: (1) the sale, lease or rent of new or used products to the consumer public; (2) the provision of personal services to the consumer public; (3) the provision of leisure services in the form of food or drink and passive or active entertainment; or (4) the provision of product repair or servicing of consumer goods.

**Comprehensive System Evaluation (CSE)**: A review, inspection and assessment of a public water system, including, but not limited to: Source; facilities; equipment; operation and administration; maintenance; records; planning documents and schedules; and monitoring, for the purpose of ensuring that safe and adequate drinking water is provided.

**Confirmation**: To demonstrate the results of a sample to be precise by means of analyzing a repeat sample.

**Connection:** The property, residential, commercial, or industrial unit that is provided water by the water system. Each residential or commercial unit in multi-unit structures will be counted as a separate connection.

**Contaminant**: A substance that may adversely affect public health or the aesthetic qualities of the water (also see Pollution).

**Covenant**: An agreement recorded with the Pierce County Auditor stating certain land use activities and/or practices are required or prohibited.

**Cross-Connection**: A physical arrangement connecting a public water system, directly or indirectly, with anything other than another potable water system, and capable of polluting or contaminating the public water system.

**Customer or Consumer**: Any person receiving water from a public water system from either the meter, or the point where the service line connects with the distribution system if no meter is present. For purposes of cross-connection control, "consumer" means the owner or operator of a water system connected to a public water system through a service connection.

**Decommission a Well**: To fill or plug a well so that it will not produce water, serve as a channel for movement of water or pollution, or allow the entry of pollutants or contaminants into the well or aquifers.

**Degraded:** Subject to adverse impact from contaminants.

**Department Certified Operator**: A person meeting the water system certification requirements of the Tacoma-Pierce County Health Department.

**Department of Health:** The Washington State Department of Health

**Disinfection**: The use of chlorine or other agent or process the department approves for killing or inactivating microbiological organisms, including pathogenic and indicator organisms.

**Distribution System**: That portion of a public water supply system which stores, transmits, pumps, and distributes water to consumers.

**Domestic Water Supply:** Any water supply that serves a residence, a place of business, or any place where people congregate, work, or reside.

**Equivalent Residential Unit (ERU)**: A system specific unit of measure used to express the amount of water consumed by a typical full-time single family residence.

**Existing Expanding Public Water System**: An approved public water system that is increasing its service area and/or number of service connections through the placement of additional water system infrastructure.

**Existing Non-Expanding Public Water System**: An existing public water system, which meets the definition of a Group A or Group B water system and does not have the approved capacity to expand.

**Feasible or Feasibility:** A preliminary determination or condition that a project, proposal, or application is capable of being done or completed successfully, and may meet the public health standards, outlined in the Tacoma-Pierce County Environmental Health Code, at the completion or approval of the project, proposal, or application.

**Fire Flow**: The rate of water flow needed to suppress fires under WAC 246-293-640 or adopted local fire protection authority standards.

**Generator Disconnect**: An electrical circuit arranged to allow connection of a generator to the power supply for the pumping equipment while prohibiting electrical current from flowing back into the main service line.

**GPM**: Gallons per minute.

**Ground Surface:** The naturally occurring surface of the land, or the finished land surface elevation resulting from an approved engineered grading and/or filling project.

**Groundwater**: All waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

**Ground Water Under the Direct Influence of Surface Water (GWI):** Any water beneath the surface of the ground, which the department determines has the following characteristics:

- Significant occurrence of insects or other macro organisms, algae, or large-diameter pathogens such as *Giardia lamblia or Cryptosporidium*; or
- Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions where natural conditions cannot prevent the introduction of surface water pathogens into the source at the system's point of withdrawal.

## **Group A Water System**: A public water system:

- That provides potable water to 15 or more service connections regardless of the number of people; or
- Constructed to serve an average nonresidential population of twenty-five or more per day for sixty or more days within a calendar year; or
- Serves 1,000 or more persons for two (2) or more consecutive days.

**Group B Service Area:** The area encompassed by the lots/parcels approved in the Group B Design Report.

#### **Group B Water System**: A public water system:

- That provides potable water to less than fifteen service connections regardless of the number of people; or
- Constructed to serve an average nonresidential population of less than twenty-five per day for sixty or more days within a calendar year; or
- Any number of people for less than sixty days within a calendar year.

**GUI**: Ground water under the direct influence of surface water, See GWI.

**Guideline**: A department document assisting the owner and/or persons in meeting a rule requirement.

**Hydraulic Analysis:** The study of the water system network evaluating water flows within the distribution system such as, peak hourly design flow plus fire flow, when required. Hydraulic analysis includes consideration of all factors affecting system energy losses.

**Inactivation**: An existing water system ceases operating as a public water system.

**Inadequate Water Supply**: A water supply that does not meet the definition of an Adequate Water Supply as listed in this chapter.

**Individual Well**: A single well constructed to serve a single-family residence, a commercial / industrial use, and/or for irrigation purposes.

**Individual Water System**: Any system, including collection, treatment, storage, or distribution facilities used primarily in connection with such a system, providing piped water for human consumption to a single family dwelling.

M or m: Meter

**Maximum Contaminant Level (MCL)**: The maximum amount of a contaminant present in water, soil or air allowable by local, state or federal law.

**Maximum Contaminant Level Violation:** A confirmed measurement above the MCL and for a duration of time, where applicable.

**Minimum Daily Design Flow**: The minimum amount of water use required for each service connection to a public water system.

Mother-in-law Housing: See Temporary Hardship Housing

**Nephelometric Turbidity Unit (NTU):** A unit of measurement used for determining the level of turbidity, or clarity, in a water sample.

**New Public Water System**: A public water system that has been created after the effective date of this regulation.

**Notice of Non-Compliance**: A description of the condition that exists on a property that is not in compliance with the requirements of this chapter. A Notice of Non-Compliance is recorded on the property title and remains in place until the non-complying action is brought into compliance with the requirements of this chapter.

**Notification of Water Service or Notice to Property Owners:** A notice recorded on a parcel indicating the public water system serving that parcel.

**NSF:** National Sanitation Foundation International

NTU: Nephelometric Turbidity Unit;

**OSS**: Onsite Sewage System

**Owner**: Any agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or any other entity that holds as property, a public water system.

**PCC**: Pierce County Code

**Peak Hourly Demand (PHD)**: The maximum rate of water use, excluding fire flow, which can be expected to ever occur within a defined service area over a sixty minute time period.

**Planned Development District (PDD):** A flexible zoning concept which provides an opportunity to mold a district composed of residential units so that it creates a more desirable environment, and results in as good or better use of land than that produced through the limiting standards provided in the regular zoning classifications.

**Planned Unit Development (PUD):** A flexible zoning concept which provides an opportunity to mold a district composed of residential and commercial units so that it creates a more desirable environment, and results in as good or better use of land than that produced through the limiting standards provided in the regular zoning.

**Plat**: The subdivision of land from one or more parcels into a total number of parcels greater than the number of parcels originally proposed to be subdivided (commonly known as a subdivision).

**Pollution**: Such contamination, or other alteration of the physical, chemical or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

**Potable:** Water that meets state and local drinking water quality standards and is safe for human consumption.

**Pressure Zone**: A distribution system, or isolated section thereof, whereby an established minimum and maximum pressure range can be maintained without the use of ancillary control equipment (e.g., booster pumps, pressure reducing valves, etc.).

Primary Standards: Standards based on chronic, non-acute, or acute human health effects.

**Project**: An application for land development and/or building permit such as a single subdivision, short division, or other division of land that will be treated as a single project for the purpose of administering these water regulations. The Health Department may use the following criteria in determining if land use applications will be determined to be a project:

- Common, adjacent or overlapping ownership of lots or parcels
- Owners connected by joint development contracts
- Common origin of lots from a common larger parcel(s)
- Contemporaneous or near-contemporaneous development schedules
- Joint or substantially similar SEPA review
- Construction of common roads
- Common Utility Corridors

#### **Provisionally Adequate**: A water system that:

- Complies with applicable water quality MCL and treatment standards
- Complies with fire flow requirements as applicable
- Meets a twenty psi minimum pressure requirement under peak hourly design flow conditions

May not be in compliance with other regulatory requirements

**PSI or psi**: Pounds per Square Inch

**Public Water System**: Any system, including collection, treatment, storage, or distribution facilities used primarily in connection with such a system, providing piped water for human consumption. Exceptions to the definition of a Public Water System Include:

- Single family residences with an Accessory Dwelling Unit located on the same parcel of land; or
- A system serving only one single family residence; or
- A system serving four or fewer connections all of which serve residences on the same farm, unless the system serves more than one residence or housing unit whose purpose is for residents and/or tenants who are contracted and/or hired workers.

**Public Well**: A well that supplies water to a public water system.

**RCW**: Revised Code of Washington

**Recreational Vehicle**: A vehicle, other than a mobile home, which is permanently designed and intended for use for temporary housing purposes. Recreational vehicles shall include, but not necessarily be limited to, campers, motor homes and travel trailers.

**Recreational Vehicle Park:** A tract of land under single ownership or unified control developed with individual sites for rent and containing roads and utilities to accommodate recreational vehicles or tent campers for vacation or other similar short stay purposes.

Repeat Sample: A sample collected to confirm the results of a previous sample analysis.

**Revoke or Revocation:** To rescind or terminate a certification, permit, formal approval or other such actions by the Health Department.

**Same Farm**: A parcel of land or series of parcels that are connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes and does not qualify as a Group A public water system.

**Sanitary Control Area:** A circular area, or portion thereof centering around a water well for the purpose of excluding existing and/or possible sources of pollution or contamination that may have an adverse impact on the water quality withdrawn from the well.

**Sanitary Seal:** A device secured at the upper opening of a well casing as to prevent a contaminant from entering into the well.

**Satellite Management Agency (SMA):** A person or entity that is approved by the department to own or operate public water systems on a regional or county-wide basis without the necessity for a physical connection between the systems.

**Secondary Standards:** Standards based on factors other than health effects such as taste and odor.

**Service**: A connection to a public water system designed to provide potable water (see Connection).

**Significant Deficiency:** An existing water system condition or situation that causes, or has the potential to cause, the introduction of pollution or contamination into water delivered to customers; including defects in design, operation, or maintenance of the source, treatment or distribution systems or by the failure or malfunction of those systems.

**Single Family Residence**: A structure designed and used solely for the purpose of a domicile by a single person or family. A structure is not a single family residence if it is used for an activity requiring a permit or license under one or more of the following rules.

- (a) Food service establishments, chapter 246-215 WAC;
- (b) Residential treatment facilities, chapter 246-337 WAC;
- (c) Transient accommodations, chapter 246-360 WAC;
- (d) Boarding homes licensing rules, chapter 388-78A WAC
- (e) Minimum licensing requirements for child care centers, chapter 170-295 WAC;
- (f) Nursing homes, chapter 388-97 WAC; and
- (g) Commercial businesses, where a fee is paid by the public for a service, and the service is provided within the single family residential structure, will not be considered a single family residence for the purposes of these regulations.

**Small Water System Management Plan:** means a guide to assist owners/operators of small non-expanding community Group A water systems in meeting the requirements of state and federal drinking water laws.

**Sources**: The source of water supplied to a public water system or individual residence, i.e. groundwater wells, springs, surface water or GUI.

**Special Purpose Sample:** A sample collected for reasons other than the monitoring compliance specified in this chapter.

**Spring**: A source of water from an aquifer that discharges to the ground surface.

**Standard Campsite**: A designated camping site which is served by nearby domestic water, sink waste, garbage disposal, and flush comfort station.

**Standard Methods**: The latest edition of the book titled *Standard Methods for the Examination of Water and Waste Water*, jointly published by the American Public Health Association, American Water Works Association (AWWA), and Water Pollution Control Federation.

**Substantive Standards**: The applications, reports, processes or other requirements listed in this chapter for the purpose of receiving a permit, maintaining a permit, receiving certification, or other approval process administered by the Tacoma-Pierce County Health Department.

**Surface Seal**: Sealing materials placed in the annular space between the permanent well casing's outer surface and the bore hole.

**Surface Water**: A body of water open to the atmosphere and subject to surface runoff.

**Temporary Event**: Those temporary public events as defined in Title 18A.33.400, "Temporary Uses", of the Pierce County Development Regulations - Zoning.

**Temporary Hardship Housing**: Those temporary uses as defined in Section 18.25.030 of the Pierce County Code. Temporary Hardship Housing may also be known as Mother-in-law housing.

**Temporary Housing Communities:** A place, area, or portion of land used for the purpose of housing persons in a non-traditional housing setting; including but not limited to such sites as tent-cities, homeless encampments, and unpermitted camp sites.

**Temporary Uses:** Those temporary uses and/or structures that conform to the definitions found in Title 18A.33.400, "Temporary Uses", of the Pierce County Development Regulations - Zoning.

**Temporary Worker**: An employee employed intermittently and not residing year-round at the same site.

**Temporary Worker Housing**: A place, area, or piece of land where sleeping places or housing sites are provided by an employer, for his or her employees, or by another person, including a temporary worker housing operator, who is providing such accommodations for employees for temporary, seasonal occupancy.

**Transient Accommodation**: Any facility such as a hotel, motel, condominium, resort, or any other facility or place offering three or more lodging units to guests for periods of less than thirty days and may include food service operations in accordance with Chapter 246-215 WAC.

umhos/cm: Micromhos per centimeter

**USEPA:** Means the United States Environmental Protection Agency

**Utility Campsite**: A standard campsite with the addition of electricity and which may have domestic water and/or sewer to the site.

**Volatile Organic Chemical (VOC)**: A manufactured carbon-based chemical that vaporizes quickly at standard pressure and temperature.

**Water Availability Letter (WAL)**: A letter or form provided to the Health Department from an approved public water system indicating a commitment to provide or modify a potable water supply to an existing or proposed lot, residence, business or other place where people live, congregate or work.

**WAC:** Means the Washington Administrative Code

Water System: See definitions for Public Water System and Individual Water System

WDOE: Means the Washington State Department of Ecology

**WDOH:** Means the Washington State Department of Health

Water Facilities Inventory Form (WFI): The department form summarizing each public water system's characteristics.

**Well**: Any excavation for the location, diversion, artificial recharge, observation, monitoring, dewatering, or withdrawal of ground water for agricultural, municipal, industrial, domestic, or commercial use, including test wells or as defined by Chapter 173-160 WAC.

**Well Field**: A group of wells one purveyor owns or controls that:

- Draw from the same aquifer or aquifers as determined by comparable inorganic chemical analysis and comparable static water level and top of the open interval elevations; and
- Discharge water through a common pipe and the common pipe shall allow for collection of a single sample before the first distribution system connection.

**Wellhead Protection Area (WHPA)**: The portion of a well's, wellfield's or spring's zone of contribution defined using WHPA criteria established by the DOH

# **SECTION 4: Applicability**

The requirements found in this chapter shall apply to all public water systems, all wells, and the determination of water adequacy for all public water systems, wells, and adequacy determinations under the jurisdiction of the Board of Health, and as required by state and local law.

# **SECTION 5: General Water Supply Requirements**

#### A. General

The Tacoma-Pierce County Health Department (Health Department) may establish guidance documents and/or templates that provide the criteria for the approval, operation and maintenance of public water systems and wells, and wells serving a single residence (individual wells). All applications subject to this chapter shall expire three years from date of submittal.

#### B. Drinking Water Supply

Every residence, business, or other place where people congregate, reside, or work within the jurisdiction of the Board of Health shall have an adequate, lawful supply of potable drinking water as defined in this chapter.

1. The Health Department may not approve a spring or hand dug well as a source of potable water for either a new residence, business or public place; nor can it approve a spring or hand dug well as a source of potable water if a spring or hand dug well serves as an existing source of water to a residence, community building, or place of business that was constructed without the required permit(s).

- 2. Adequate water supply may be provided by individual wells or public water systems, provided appropriate state and local water supply requirements have been met. The health officer shall determine the adequacy of each proposed water supply as defined in, but not limited to, this chapter.
- 3. If a parcel of land is part of a plat (subdivision), short plat (short subdivision) or project that gained approval subject to the provision of public water, or if the parcel's building permit was conditioned upon the use of public water, then:
  - a. The Health Department may not approve an individual well, including irrigation wells, for use as a water source.
  - b. The parcel or subdivision (plat) must be provided water by the public water system.
- 4. Interties to other water sources such as irrigation wells, springs, or other unapproved water sources shall not be allowed.

#### Bottled Water

- a. Any water source bottled and distributed for use as drinking water by the general public shall meet the minimum requirements outlined in Chapter 246-290 WAC.
- b. Prior to bottled water being used for public consumption at a temporary event or any other temporary uses as defined in this chapter, the applicant shall provide evidence to the Health Department that the water meets the requirements of Chapter 246-290-130 (10) WAC, and Section 15.R of this Chapter.
- 6. Approval of water supply applications shall not be granted if there exists a health code violation on the property listed on the application, unless
  - a. the property owner has entered into an agreement to address the violation within an agreed upon time limit; and
  - b. the violation does not pose a health risk to the proposed water supply related application.

The approval may be revoked if the violation is not corrected to meet the requirements of the health code within the agreed upon time limit.

#### C. Certification and Licensing

Uncertified or unlicensed persons engaging in work that requires either a certification or license shall be subject to any and all enforcement measures contained in Chapter 1 of these regulations.

# **SECTION 6: Wells**

#### A. Applicability

All wells to be located within the jurisdiction of the Board of Health shall meet the requirements of this section.

#### B. General Requirements For Wells

- 1. Any new water source originating from a well must be from a drilled well, unless specifically authorized by the Health Department.
- 2. All new wells constructed within the jurisdiction of the Board of Health must be approved by the Health Department and, at a minimum, meet the requirements of this chapter and Chapters 173-160 and 173-162 WAC.
- 3. Approval of a well authorizes its use only for the specific use for which it was designated and approved to be constructed.
- 4. The Health Department reserves the right to request any and all additional information or documentation necessary to determine if a well has been sited and/or constructed to meet the substantive requirements of this chapter or any other applicable state or local regulations. Failure to submit the requested documentation will result in the cessation of well application processes by the Health Department.
- 5. The Health Department may not approve a new well located in an imminently geologically unstable location.
- 6. Equipment, devices, and materials used in the production, transport, storage, treatment, or delivery of drinking water shall meet relevant NSF and/or ANSI standards, or have the approval of the WDOH and/or WDOE as applicable.
- 7. The Health Department shall not approve a spring or dug well as a new water source.
- 8. A well may not be constructed if, in the determination of the health officer, it will cause the underlying groundwater quality to be subject to pollution as a result of its use.
- 9. The Health Department may revoke, at any time, well siting or construction approval if information is provided to the Health Department indicating that the original application and/or supplemental documentation contained significant errors or omissions.
- 10. The standards and requirements of this chapter represent the minimum standards and requirements established to be protective of public health. At the determination of the health officer more protective measures may be required than those contained within this chapter.

11. The Health Department may order a well contractor, well operator, and/or the property owner to repair, alter, or decommission a well at the owner's expense if the department determines that the construction of the well did not meet the standards for well construction in effect at the time of construction or at completion.

# C. Well Siting

The siting of all wells within the jurisdiction of the Board of Health shall meet the following requirements.

1. Well Site Locations.

All well site locations shall meet the appropriate setback requirements of this chapter, Chapter 173-160 WAC, or Chapter 246-290 WAC; whichever is most protective of public health and the environment. The Health Department may increase the setback requirements for the siting of individual or public wells if, in the health officer's determination, an increased setback provides appropriate levels of protection from physical harm, or from chemical or biological contamination.

#### 2. Access and Inspection

By submitting a well site or well construction application the applicant is agreeing to the access of the property by Health Department personnel for the purposes of completing the site inspection, construction inspection, or repeat inspections as necessary to complete the application approval process.

- a. All well sites are subject to inspection by Health Department staff prior to site approval.
- b. Wells and/or well sites must be available for access by Health Department staff. Sites shall remain open at all times during the siting inspection processes, or open for access by previously agreed arrangement with the Health Department.
- c. Well sites that are not clearly marked in the field, or are not located as indicated on the application site plan or site map, will require reinspection and the submittal of the appropriate reinspection fee.
- d. If, through reasonable determination by Health Department staff, the entrance onto a property may cause a physical threat or harm, the inspection process will immediately cease until such threats to physical safety or harm have been satisfactorily addressed. Re-inspection by the Health Department due to the presence of a potential physical threat to personal safety will be cause for a reinspection fee to be required.
- e. The applicant shall provide all gate or entry access codes. If the incorrect gate access or entry code is provided to the Health Department, making the site inaccessible, a reinspection fee will be required.

f. Dogs or other animals threatening or capable of causing physical harm must be placed in a secured area or in such a fashion as not to hinder or disrupt the inspection process.

# 3. Application

Complete and appropriate application documents and fees must be submitted to the Health Department for review prior to any action taken by the Health Department.

# 4. Contamination of Water Supply

Applications for building permit or land use proposing a new well, or one that includes the use of an existing well, as its source of potable water may not be approved if the well or well site is subject to known or potential sources of contaminants.

#### 5. Clustered Wells

Clustered wells will not be approved unless an applicant can provide justification that the wells will not have an adverse impact on current or proposed wells, and will not adversely impact the water resource.

# 6. Replacement Wells

- a. If the Health Department approves a replacement well, then the new well must meet current standards for approval and the applicant must decommission the existing well according to law prior to final approval of the new well as a water source.
- b. Replacement wells shall not be approved if, in the determination of the Health Department, the replacement well:
  - 1) Poses a current or potential threat to public health or the water resource; or
  - 2) Does not meet siting or site restrictions set forth by these regulations or other state or local agency regulations, and the property is able to be provided water by a public water system.

#### 7. Re-location or Re-siting of Wells

Well site locations, having received initial approval from the Health Department, may be moved only after consultation with the Health Department. An amended site plan showing the new location of the well shall be submitted to the Health Department prior to final approval. A subsequent application and/or fee may be required if the change in location requires additional review, site inspection(s), and/or applications.

# 8. Impact on Existing Water Sources

A new beneficial use of water must not interfere with a prior, lawful, beneficial use of water. The property owner must demonstrate that in siting a well the construction and use of the well(s) will not have an adverse impact on the quantity, quality, or compliance of any existing well on or near the property. If the Health Department has probable cause to believe a newly constructed well has affected or will adversely affect other wells or the quality of the water source, then the Health Department may require specific flow tests of both the new and the affected wells. The Health Department may not grant approval for those new wells that demonstrate an adverse impact on other nearby wells or to the resource (Also see Section 6.C.5 -Clustered Wells).

# 9. Sanitary Control Area

Each proposed well must be sited so that the appropriate Sanitary Control Area can be established.

- a. If an existing lot, proposed lot, or proposal for a plat or subdivision offers one or more potential well-site(s) that meets the setback requirements of this chapter, then the proponent shall propose a well-site with a sanitary control area(s) that will not cross the boundary of the lot on which it is located. If no well-site meets the setback requirements by confining its sanitary control area(s) within the lot, then the proponent may propose an alternative well-site that meets the setback requirements and provides the least inconvenience to other lots within its sanitary control area(s).
- b. The developer of each parcel proposed to have an individual well shall establish a sanitary control area centered on the well that will provide the domestic water for the lot. If a sanitary control area crosses a lot line, the property owner must obtain and record a restrictive covenant from the affected property owner to exclude sources of pollution. Different classes of hazards to wells and water supplies may require differing sanitary control areas which may be applied under the direction of the health officer.
- c. A circular sanitary control area must be centered on the well with a minimum of a 100 foot radius, or a larger radius as determined by the health officer necessary to be protective of public health.
- d. The applicant must provide a copy of the recorded covenant to the Health Department. The covenants shall be recorded at the Pierce County Auditor's office.
- e. The covenant shall clearly describe the sanitary control area designated for well identified on the well application form(s).

f. Sanitary control areas must conform to the requirements of this chapter, WAC 246-290, WAC 246-291, or WAC 173-160, whichever is more protective of public health and the water resource.

# 10. New Lots with On-site Sewage Systems

If a new lot is to have both an individual well and an OSS, then the lot must be at least a full acre in size and have a shape that will accommodate all the required horizontal separations and setbacks, regardless of source.

# 11. Buildings

Individual and/or public wells may not be located within a garage or inhabited building. Wells serving a single resident (individual well) must be at least five (5) feet distance from any part of such building(s). Public water system wells must be located at least 100 feet distance from any building or structure, or source of contamination. An exception to the building setback requirements can be made when a well is to be located within 100 feet of structures specifically designed for use in the delivery of a water supply.

#### 12. Critical Areas

A well may not be located within any areas that are restricted by Critical Areas rules and regulations established by Pierce County or any other entity with the legal authority to establish land use regulations, unless evidence of written approval by the jurisdictional agency is provided to the Health Department.

#### 13. Urban Growth Area and Group A Service Areas

In accordance with the Pierce County Comprehensive Plan, if an existing lot of record or a proposed lot is inside an urban growth area, as defined by Chapter 36.70A RCW, or within the service area of a Group A public water system with the willingness and capacity to serve, then it may not use a well, or establish a Group B water system as a water source unless the designated service provider states in writing that it will not or cannot furnish water service to the property within 120 days, or the water system cannot meet the timely and reasonableness provisions of Pierce County's Coordinated Water System Plan.

This provision shall not limit the right of the water purveyor to require a property owner to comply with conditions in order to receive water from the provider; including but not limited to payment of fees and/or paying additional infrastructure charges. If a designated service provider conditions providing water upon such requirements, the provider shall not be deemed to have refused to provide water.

#### D. Request for Reduced Setback Requirements

1. If a lot of record has no access to an approved public water system, and has no well site that meets all of the requirements of this Chapter, the property owner may identify a next-best, non-conforming site for an individual well, and submit a

request for a variance submitted by a licensed hydrogeologist that includes justification demonstrating each of the following:

- a. Why full compliance is impossible.
- b. Why the suggested location provides the least impact to public health sufficient to locate a well.
- c. What measures that will be taken to meet the intended level of public health and resource protection, including but not limited to the drilling, construction and operation of the water well.
- d. The well casing and seal are and will be impervious to contaminants/pollution.
- e. Potential pollution from adjacent properties will not impact the well.
- f. The proposed well will not have an adverse impact on existing neighboring wells.

The Health Department will take into consideration the variance request and make a determination based on the justification and information provided. Submittal of justification does not guarantee that a variance will be granted.

#### 2. Conditions

Conditions may be placed on the approval of a reduced separation through review and inspection by the Health Department. Conditions may include but not be limited to: increased water quality sampling, enhanced well construction requirements, and recording notification on the property title. The Health Department may request review by the WDOE if the proposed well location may violate state rules and regulations.

#### E. Submittal Requirements for Well Site Approval

The following submittal standards shall apply to all wells drilled within the jurisdiction of the Board of Health.

#### 1. Application

Applications for individual well siting shall include the following items:

- a. Complete application form(s) provided by the Health Department, and all required documentation included as part of the application package.
- b. Appropriate fee(s) as currently adopted by the Board of Health.

#### 2. Process Restriction

The Health Department will not begin the well siting approval process unless and until all of the items listed in Section 6.E.1 have been completed and submitted.

#### F. Well Site Approval

1. General Well Site Approval Requirements

For a well site to be approved each of the following requirements must be met:

- a. A correct and complete application, and all required documentation included as part of the application package, has been submitted to the Health Department for review.
- b. All lot size and land use setback requirements of this chapter and/or other requirements established by state or local regulation, including but not limited to Chapter173-160 WAC, and/or Chapter 246-290 WAC, and/or Chapter 246-291 WAC, whichever is more protective of public health and the resource, have been demonstrated.
- c. Well site has met setback requirements for identified or potential sources of contamination.
- d. Compliance with conditions on the well site location as set forth as a result of the Health Department site inspection and/or other investigative information.
- e. Any additional water quality or quantity test results, pumping test results, or reports required by the Health Department that are necessary to determine if the well site meets state and local standards.
- f. Well site application has included all appropriate covenants, easements, and sanitary control area requirements for well placement as noted in this chapter.

# 2. Well Site Approval Expiration

The applicant must complete the siting and construction of the well within three years of the well site submittal date. If the well has not received final approval, including siting, construction, water quality, and water quantity, the application will be considered expired and the applicant must submit a new application and associated fees for well siting and construction.

Extensions to the expiration dates may be granted when the siting and construction of the well is impacted by events beyond the control of the applicant. Justification must be provided in writing to the Health Department indicating that the applicant cannot meet the three year expiration date. The justification must be received and approved by the Health Department prior to the expiration date of well site approval.

#### G. Approval of Existing Wells

Applicants wishing to use an existing well as a source of water for a building, land use, or other permit under the jurisdiction of the Health Department shall meet the following requirements.

- 1. The well must meet the siting standards of this chapter; and
- 2. The well must meet the construction standards of this chapter; and
- The water produced by the well must meet the water quality and quantity standards of this chapter; and
- 4. Applicant must submit the appropriate complete application documents and fees; and
- 5. If the existing well is not on property owned by the applicant, the applicant must demonstrate rights to use and access of the well in the form of covenants and/or easements.

# **SECTION 7: Well Construction**

#### A. Applicability

All wells constructed within the jurisdiction of the Tacoma-Pierce County Board of Health shall meet the following requirements.

#### B. General Requirements

#### 1. Notification

- a. The well driller or their appointed representative shall provide the Health Department with at least two full business days notice prior to commencing well drilling or decommissioning. Weekend days and holidays shall not count as business days; and
- b. If notification provided through writing or by telephone in part 7.B.1.(a) cannot be met, then the well driller or their appointed representative shall provide the Health Department with at least 24 hour notification, or by a previously arranged and agreed to notification period.
- c. Notification may be in writing, by contacting the Health Department well construction notification telephone line, or by another method previously agreed to by the Health Department.
- d. The Health Department may accept another method of notification that has been previously arranged by the well driller and approved by the Health Department.

- e. Under no circumstances will the requirement to notify the Health Department of well construction or decommissioning, as defined in this chapter, be waived.
- f. Notification shall at a minimum include the following:
  - 1) Date that actual drilling will commence (this does not include moving equipment to site or setting up to drill); and
  - 2) Name of drilling company; and
  - 3) Name of driller and license number, indicate if driller is a Trainee or a trainee is involved; and
  - 4) Name of applicant (person you are drilling the well for); and
  - 5) Work site address; and
  - 6) Washington State Department of Ecology (WDOE) Notice of Intent to Drill number.
- 2. All wells shall, at a minimum, meet the construction requirements of this chapter and/or Chapter 173-160 WAC, whichever is more protective of public health and the water resource.
- 3. All wells undergoing new construction or modification, and/or are to be used as a water source for any permit application within the BOH jurisdiction are subject to inspection(s) conducted by Health Department staff.
- 4. Wells and/or well sites must be open to access by Health Department staff at all times during the construction or decommissioning inspection, any subsequent re-inspections, and the approval process, unless a previously arranged and agreed to method of inspection has been has been approved by the Health Department.
- 5. All wells shall be constructed by individuals meeting the licensing requirements of the WDOE (Chapter 173-162 WAC), and who are not in violation of current state or local well construction or licensing requirements stemming from construction activity at other well sites. Well drillers must show their license to the Health Department inspector if requested to do so at the time of inspection.
- 6. Well construction under the jurisdiction of the Board of Health shall not begin until all of the appropriate application materials have been submitted, and without prior approval, in written form, from the Health Department, or by another method previously arranged and approved by the Health Department. Construction of a well prior to approval shall be a violation of this chapter.
- 7. Once well construction has commenced, the driller/operator shall not remove the drilling equipment from the site unless given prior approval by the Health Department or WDOE, or the well construction process has been completed.

Exceptions to this requirement may be granted in the event of an emergency, equipment breakdown that cannot be repaired onsite, or other reason deemed appropriate by the health officer.

- 8. Well construction shall cease if, as determined by the Health Department or WDOE, at any time the construction process or the equipment used in the well construction process poses a threat to the water resource or public health. Construction shall not begin again until such time as given approval in writing by the Health Department and/or WDOE.
- 9. Wells that have not been approved due to poor water quality, or well construction deficiencies, and that are considered to be a threat to public health and/or the water resource, must be decommissioned to meet the requirements of this chapter and Chapter 173-160 WAC.
- 10. Information regarding construction methods, equipment, or materials used by the well driller/operator requested by the Health Department shall be provided in a timely manner. Information withheld shall be cause for denial of all well construction permit approvals within Pierce County associated with the drilling firm until all required information is revealed.
- 11. New wells under the jurisdiction of the Board of Health that have begun construction prior to having approval to commence construction, as granted by the Health Department, will be required to submit an application that is subject to twice the original application fee.
- 12. Existing wells that undergo significant repair or maintenance shall require the submittal of a well construction application to the Health Department, as set for in subsection C below. Significant repair or maintenance includes: well deepening, screen placement, advancement of casing, removal or "backing out" of casing, removal of more than 24 inches of surface seal materials, and/or other maintenance and repair procedures that may alter the well casing or surface seal below the original ground surface.
- 13. All wells, at their completion, must be fitted with a cap, sanitary seal, or other method of preventing contamination from entering into the well from the upper opening of the well casing.
- 14. All well drilling must immediately cease if the well driller is not in possession of their drilling license, as required by Chapter 173-162 WAC, at the time of the Health Department or WDOE inspection.
- 15. The standards and requirements of this chapter represent the minimum standards and requirements established to be protective of public health. At the determination of the health officer more protective measures may be required than those contained within this chapter.
- 16. Normal inspection hours for the Health Department are Monday through Friday, from 8:30 a.m. to 4 p.m. except holidays observed by the Board of Health. Well drillers or well construction applicants should not schedule inspections outside of

normal Health Department inspection times. Exceptions to these restrictions may be made by the Health Department in emergency situations or under extraordinary circumstances and subject to additional fees.

Applicants may request an exception to these inspection restrictions by providing either the appropriate technical justification and/or scheduling justification. A supplemental fee may be charged for wells requiring inspection on Saturdays, Sundays, or holiday periods that fall outside of the Health Department's normal working hours.

17. All persons supervising, constructing, altering, contracting for, or decommissioning a well are subject to the provisions of RCW 18.104.030: Compliance Enjoined.

# C. Well Construction Application Requirements

- 1. Completed application form(s) provided by the Health Department, and all required documentation listed in the application package.
- 2. Applicants seeking well construction approval are subject to all of the requirements outlined in Section 7.B. as appropriate.

# D. Well Construction Approval

- The constructed well meets the requirements of this chapter, Chapter 173-160
  WAC, and any additional construction requirements imposed by the Health
  Department and/or WDOE to meet public health and safety standards; and
- 2. Water quantity meets the requirements of Section 10; and
- 3. Water quality meets the requirements of Section 14, Tables 1 and 2; and
- 4. An accurately completed water well report (well log) has been submitted to the Health Department; and
- 5. Any additional documentation or information determined to be part of the well construction process as requested by the Health Department; and
- 6. Documentation of any special construction requirements as set forth by the Health Department and/or the WDOE has been submitted, approved, and implemented during the construction process; and
- 7. The well has been drilled in the location approved by the Health Department; and
- 8. All inspection, reinspection, application, and resubmittal fees accumulated by the applicant in order for the Health Department to complete the application process have been paid.

# **SECTION 8: Abandoned Wells**

Any well that is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical, or is an environmental, safety or public health hazard shall be decommissioned. The decommissioning process shall meet the requirements set forth in this chapter or Chapter 173-160 WAC, whichever is more protective of public health and the ground water resource.

# **SECTION 9: Decommissioning Wells**

#### A. Applicability

All wells decommissioned within the jurisdiction of the Board of Health shall meet the following requirements.

## B. General Requirements

- Wells and/or well sites shall be accessible for inspection by the Health
  Department staff at all times during the decommissioning and investigation
  processes, unless a previously arranged and agreed to method of inspection has
  been has been approved by the Health Department.
- 2. Applications to decommission a well must be submitted to the Health Department using Health Department forms.
- 3. The decommissioning process must be completed by a person(s) who meets the WDOE licensing requirements (Chapter 173-162 WAC), and who is not currently in violation of state or local well construction, decommissioning, or licensing requirements stemming from activity at other well sites.
- 4. Once well decommissioning has commenced, the driller/operator shall not remove the drilling equipment from the site unless given prior approval by the Health Department or WDOE, or the decommissioning process has been completed. Exceptions to this requirement may be granted in the event of an emergency, equipment breakdown that cannot be repaired onsite, or other reason deemed appropriate by the health officer.
- 5. The well driller or their appointed representative shall provide the Health Department with at least two full business days notice prior to commencing well drilling or decommissioning. Notification requirements shall be the same as those detailed in Section 7.B.1. Weekend days and Board of Health observed holidays shall not count as business days.
- 6. A copy of the final decommissioning report form shall be submitted to the Health Department. The report form shall conform to the well construction/decommissioning reporting forms provided by the WDOE.
- 7. The Health Department reserves the right to request any additional well information, documentation, or information regarding the actions taken by the

driller necessary to determine if a well has been decommissioned to meet the requirements of this chapter or any other applicable state or local regulations. Failure to 1) submit the requested documentation, or 2) comply with actions requested by the Health Department of the driller will result in the cessation of all well decommissioning application processing by the Health Department until such documents have been submitted or actions have been satisfactorily completed.

- 8. Well decommissioning under the jurisdiction of the Board of Health shall not begin without prior approval, in written form, from the Health Department, or by another method previously arranged and approved by the Health Department. Decommissioning of a well prior to approval shall be a violation of this chapter. Wells being decommissioned under the jurisdiction of the Health Department that have begun the decommissioning process prior to approval to do so by the Health Department will be required to submit an application that is subject to twice the original application fee.
- 9. The Health Department may revoke, at any time, a well decommissioning approval if information is obtained by the Health Department indicating that the original application and/or subsequent information provided to the Health Department by owner, well driller, or applicant contained significant errors or omissions.
- 10. Normal inspection hours for the Health Department are Monday through Friday, from 8:00 am to 4:30 pm except holidays observed by the Board of Health. Well drillers or well construction applicants should not schedule inspections outside of normal Health Department inspection times. Exceptions to these restrictions may be made by the Health Department in emergency situations or under extraordinary circumstances. Applicants may request an exception to these inspection restrictions by providing either the appropriate technical justification and/or scheduling justification. A supplemental fee may be charged for wells requiring inspection on Saturdays, Sundays, or holiday periods that fall outside of the Health Department's normal working hours.

# C. Submittal Requirements

- Completed application form(s), as provided by the Health Department, and all required documentation included as part of the application package, or subsequently required by the Health Department in determining compliance with this chapter shall be submitted; and
- 2. All appropriate fees as established by the Board of Health shall be paid.

#### D. Well Decommissioning Approval

In order for the Health Department to issue a final approval the decommissioning of a well, the following requirements must be met:

- 1. The well has been decommissioned to meet Chapter 173-160 WAC requirements, and any additional requirements set forth by the Health Department or WDOE to meet public health and safety standards; and
- 2. A completed decommissioning report form, and documentation of any additional decommissioning requirements as set forth by the Health Department and/or the WDOE, has been submitted to the Health Department.

# **SECTION 10: Water Quantity**

# A. Applicability

All wells used for potable water purposes within the jurisdiction of the Board of Health shall meet the following requirements.

#### B. Individual Wells

- 1. In order for the Health Department to approve an individual well as an adequate source of water, the following requirements must be met:
  - a. The well must provide at least 400 gallons per day; and
  - b. If, according to the water well report, the well is not capable of producing at least five (5) gallons per minute, then the water storage requirements of this chapter must be met.
  - c. If the water well report establishes that the well is not capable of producing at least three (3) gallons per minute, then the applicant must provide the Health Department with a detailed flow test showing pumping rate, drawdown and water level recovery measurements. Measurement for drawdown shall follow the guidance provided in Ecology Bulleting #30 Aquifer Test Procedures, or be taken at the following intervals:
    - 1) Every minute for at least 15 minutes; then
    - 2) Every five minutes for 35 minutes; then
    - 3) Every 10 minutes thereafter until no water level drawdown is detected for at least 20 minutes, or for a total measurement time of no less one hour.
    - 4) Measurement for water level recovery shall be the same as 1) through 3) above. However, measurements for recovery may cease when a change in the level of recovery has not been detected for 10 minutes.
- 2. If, in the opinion of the health officer, there is a question regarding the amount of water that a well is able to produce, the Health Department may require

additional testing of the well and documentation to provide sufficient information in making a water quantity determination.

#### C. Public Water Systems

- 1. In order for the Health Department to approve a new or existing well as the source for a public water supply, the well must provide at least 750 gallons per day, each day for each water service connection (refer to the Health Department Public Water System Design Report Template).
- Water flow and storage for public water systems must meet the requirements outlined in either the current Washington State Department of Health Group B Water System Workbook and Appendices, or such Design Report Template as provided by the Health Department whichever is the larger amount for both flow and storage.

# **SECTION 11: Water Quality**

## A. Applicability

All wells and/or water sources used for potable water purposes within the jurisdiction of the Board of Health shall meet the following requirements.

#### B. Individual Wells

- 1. In order for the Health Department to approve a new or existing individual well as an adequate source of water, the water quality must, at a minimum, meet the bacterial, physical, and chemical standards set forth in Section 14 of this Chapter, and/or any other standard for water quality established by the Health Department necessary to protect human health.
- 2. All treatment devices and/or methods used to help the water quality meet the substantive requirements of this chapter must be reviewed and approved by the Health Department prior being put into permanent use.
- 3. A document shall be recorded with the Pierce County Auditor indicating that a water quality treatment device and/or method is required for the water source serving the property and/or dwelling(s). A copy of the recorded document shall be submitted to the Health Department prior to the device and/or method being put into permanent use. A copy of the document shall be provided to each connection on a Group B water system.

# C. Public Water Systems

1. In order for the Health Department to approve a new or existing well as the source for a public water supply, the water quality must, at a minimum, meet the bacterial, physical, and chemical standards set forth in Section 14 of this Chapter, or any other standard for water quality established by the Health Department necessary to protect human health.

- 2. All treatment devices and/or methods used to help the water quality meet the substantive requirements of this chapter must be reviewed and approved by the Health Department prior being put into permanent use.
- 3. Public water systems shall maintain water quality within their system as to meet the standards set forth in Section 14 of this chapter.

# **SECTION 12: Water Storage Requirements for Individual Wells**

# A. Applicability

All water storage structures used for potable water purposes within the jurisdiction of the Board of Health shall meet the following requirements.

# B. Storage

If the well cannot produce at least five (5) gallons per minute for at least one uninterrupted hour, as evidenced by an appropriate flow test, then the property owner must use storage facilities that meet NSF or ANSI STANDARD 61 and have a storage capacity of at least 500 gallons.

# C. Installation of Storage.

The property owner shall provide the Health Department with written documentation of the storage installation prior to the Health Department's approval of the water source.

#### **SECTION 13: Easements**

#### Applicability

If an application proposes any component of an individual well, any component of a public well, a water storage device, or a water distribution line to be located either on another parcel or closer to a lot boundary than allowed by law, including these regulations, or if the sanitary control area for any of these crosses a lot line, then the applicant must obtain and record easements or other adequate rights with respect to the land of others that would make the location of the component(s) lawful and allow for the transport of water between source and each end use.

Applicants must provide written documentation, as recorded with the office of the Pierce County Auditor, that the appropriate required easements have been established.

#### **SECTION 14: Public Water Systems**

### A. Purpose and Intent

The purpose and intent of this section is to 1) establish minimum standards for the approval, management, and operation of Small Group A water systems and Group B water systems, and 2) ensure that public water systems and their source water is protected from contamination or interference with supply. For the purposes of this chapter, a Small Group A water system shall be those public water systems with fewer than 100 connections.

#### B. Applicability

- Public water systems under the jurisdiction of the Board of Health shall meet the requirements of this section. Water systems not meeting the requirements of this chapter or state public water system requirements will be deemed out of compliance with public health standards, will be judged an inadequate water supply, and shall be subject to any or all of the enforcement measures established in Chapter 1 of the Environmental Health Code.
- 2. Jurisdictional authority may be established through a Joint Plan of Responsibility with the Washington State Department of Health's Office of Drinking Water, a copy of which shall be made available upon request.
- 3. In addition to any requirements provided by state or federal law, the standards and requirements of this chapter represent the minimum standards and requirements established to be protective of public health. At the determination of the health officer, more protective measures may be required for the purposes of protecting public health and the water supply resource than those contained within this chapter if said measures are essential to maintain the health and safety of the public and such water supply resources.
- 4. The health officer, or his or her, designee may declare a public health emergency as provided by RCW 70.119A.030. Water system problems determined to be a public health emergency as the result of violation of laws or regulations shall be subject to the enforcement provisions in Chapter 1 of the Health Department's Environmental Health Code. In addition, as limited by RCW 70.119A.040, the Health Department may also impose penalties for violations of laws or regulations that are determined to be a public health emergency.

#### C. Access

1. As authorized by RCW 70.119A.150.(C), the health officer or their designee shall have the right to enter a premises under the control of a public water system at reasonable times with prior notification in order to determine compliance with applicable laws and rules to test, inspect, or sample features of a public water system and inspect, copy, or photograph monitoring equipment or other features of a public water system, or records required to be kept under laws or rules regulating public water systems. For the purposes of this section, "premises under the control of a public water system" does not include the premises or private property of a customer of a public water system past the point on the system where the service connection is made unless a previously designated sample location is located on private property.

- a. The health officer or their designee need not give prior notification to enter a premises under paragraph "1" of this subsection if the purpose of the entry is to ensure compliance by the public water system with a prior order of the Health Department or if the health officer or the health officer's designee has reasonable cause to believe the public water system is violating the law and poses a serious threat to public health and safety.
- b. If consent to entry is denied, the health officer or their designee may seek a warrant for the purpose of conducting an administrative inspection from a court official authorized to issue such warrants. An administrative search warrant may be requested for the purposes of inspecting or examining property, buildings, premises, place, books, records, or other physical evidence, or conducting tests or taking samples. The warrant shall be issued upon probable cause. It is sufficient probable cause to show any of the following:
  - 1) The inspection, examination, test, or sampling is pursuant to a general administrative plan to determine compliance with laws or rules administered by the Health Department; or
  - 2) The health officer or their designee has reason to believe that a violation of a law or rule has occurred, is occurring, or may occur, and/or poses a serious threat to public health and safety..
- The health officer may inspect any public water system under the jurisdiction of the Board of Health for the purpose of conducting a water system sanitary survey, determining conformance with construction documents, investigating a water system complaint or non-compliance with state or local regulations, collecting water samples, or carrying out any other activity necessary for protecting the public health of the users of the water system as authorized by RCWs 70.05.070, 70.119A.030, 70.119A.050, 70.119A.130, and 70.119A.150. Any costs incurred by the health department as the result of these inspections shall be paid by the water system owner or their representative (including a SMA).
- Water system owners and/or managers shall provide safe access to their respective public water system facilities at such time and date as the health officer may require.

#### D. Source Water Approval

1. Wells used to supply water to public water systems must meet the well siting and construction requirements of this chapter.

Reduced setback for a well site will not be granted for public water system wells unless there is an overriding public health concern that may only be addressed by the proposed well. Justification for a reduced setback shall be provided through the process outlined in Section 6.D of this Chapter.

- 2. The water source for a public water system shall meet the following requirements for approval and protection.
  - a. The owner shall ensure that drinking water is obtained from the highest quality source feasible.
    - 1) Existing sources shall conform to the primary and secondary water quality standards established in this chapter.
    - Proposed sources shall conform to the primary and secondary water quality standards established in this chapter and the well construction standards established in this chapter. The owner shall be responsible for submitting evidence required by the Health Department to determine whether a proposed ground water source is Ground Water Under the Direct Influence of Surface Water (GWI).
    - 3) The Health Department shall not approve a hand dug well, spring, surface water or groundwater under the influence of surface water (GWI) as a water source for a new or expanding public water system.
  - b. No new source, previously unapproved source, or change from the original approved design of an existing source shall be used as a drinking water supply without Health Department approval. A person seeking approval shall ensure compliance with the Design Report requirements of this chapter as applicable and provide:
    - 1) A copy of the water right permit, if required, obtained from the WDOE for the source, quantity, type, and place of use; and
    - 2) A copy of the source site inspection approval; and
    - 3) Well source development data establishing source capacity. Data shall include static water level, yield, amount of drawdown, recovery rate and duration of pumping. The source shall undergo a pumping test to determine whether the well and aquifer are capable of supplying water at the rate desired and to provide information necessary to determine proper pump settings; and
    - 4) Data detailing upgradient water uses affecting either water quality or quantity; and
    - 5) A map showing the project location and vicinity, including a three hundred foot radius around the well site designating the preliminary short term ground water contribution area; and
    - 6) A map depicting topography, distances to well or spring from existing property lines, buildings, potential sources of contamination within the three hundred foot radius around the

well, and any other natural or man-made features affecting the quality or quantity of water.

- c. Surface water and GWI sources that supply existing unpermitted public water systems.
  - A map depicting topography, distances to surface water, well or spring from existing property lines, buildings, potential sources of contamination within the three hundred foot radius around the well, and any other natural or man-made features affecting the quality or quantity of water; and
  - 2) Copies of the recorded legal documents for the sanitary control area:
  - 3) A copy of the water well report and water rights if applicable; and
  - 4) A general description of the recharge area affecting the quantity or quality of flow. Seasonal variation shall also be included; and
  - 5) Well development data establishing source capacity. Data shall include static water level, yield, amount of drawdown, recovery rate and duration of pumping.

The source shall undergo a pumping test to determine whether the well and aquifer are capable of supplying water at the rate desired and to provide information necessary to determine proper pump settings.

Existing and proposed sources shall conform to the well construction standards established under Chapter 173-160 WAC or this chapter, whichever is more protective of the water source and public health.

#### d. Source Water Quality

- Submit an initial analysis result of raw water quality from a certified lab, including as a minimum, a bacteriological, and complete inorganic chemical and physical analysis of the source water quality;
- 2) In areas where the department determines that other contamination may be present, or at the discretion of the department, sample results for additional contaminants may also be required;
- 3) If water quality information from 1) and 2) of this subsection shows a contaminant level of concern, the department may require

further action by the owner; and

If water quality results taken from the proposed source confirm a primary and secondary MCL violation, the owner shall ensure that appropriate treatment is provided which shall eliminate the public health risk to consumers served by the system.

- 4) The Health Department may deny a proposed water source based on the review of the type and level of contaminants present in the source water.
- e. Sanitary control area.
  - The water system owner shall ensure that a sanitary control area is maintained around all sources for the purpose of protecting them from existing and potential sources of contamination, and impact to source waters including but not limited to:
    - i. Permanent animal keeping enclosures, or those areas where livestock have free access; or
    - ii. Sewage disposal systems and their storage and/or conveyance structures; or
    - iii. Places where hazardous materials are used, stored or handled; or
    - iv. Natural surface water drainage courses,
      - Engineered swales and drainage channels will be addressed on a case-by-case basis; or
    - v. Places where putrifiable wastes are stored or collected; or
    - vi. Other sources or potential sources of contamination as determined by the health officer.
  - 2) The minimum sanitary control area, normally centered on the well, shall have a radius of one hundred feet (30.75 meters) for wells, and two hundred feet (61.5 meters) for springs, unless engineering justification supports a smaller area. The justification must address geological and hydrological data, well construction details and other relevant factors necessary to assure adequate sanitary control.
  - 3) The Health Department may require a larger sanitary control area if geological, hydrological, and other site data to support such a decision. It shall be the owner's responsibility to obtain the protection needed.

- 4) No source of contamination may be constructed, stored, disposed of, or applied within the sanitary control area without the permission of the Health Department and the system owner. Those individuals or persons whose activities which, in the determination of the health officer, contribute contamination to the sanitary control area, or has or may have an adverse impact on the water source within the sanitary control area shall be determined to be in violation of this chapter, and subject to the enforcement provisions in Chapter 1 of the Environmental Health Code.
- 5) The sanitary control area shall be owned in fee simple, or the owner shall have the right to exercise complete sanitary control of the land through other legal provisions.
- 6) The owner shall obtain a duly recorded restrictive covenant which shall run with the land, restricting the use of said land in accordance with these rules.
- 7) Wells that are not owned by the water system shall be prohibited within the Sanitary Control Area.
- E. Water System Design Requirements and Approval
  - 1. General Design Requirements
    - a. Water systems under the jurisdiction of the Tacoma-Pierce County Board of Health shall meet the following requirements prior to being granted approval to operate as a public water system in Pierce County.
    - b. Water system owners shall ensure that good engineering practices are used in the design of all public water systems.
    - c. Design Reports shall be submitted to the Health Department for written approval prior to installation of any new water system, or water system extension or improvement with the following exceptions:
      - 1) Installation of valves, fittings, and meters; or
      - 2) Repair of a system component or replacement with a similar component of the same capacity and purpose; or
      - Maintenance or painting of surfaces not contacting potable water;
         or
      - 4) Other improvements mutually agreed to by the water system owner and the Health Department.

- d. Design Reports shall conform to the Design Report template provided by the Health Department or a close facsimile as approved by the Health Department, and shall include at a minimum, provisions for the following:
  - 1) Methods for providing for water transport from the source to each connection, and methods for protecting the well and wellhead area (easements, covenants, etc.); and
  - 2) Calculations for pump sizing, distribution system, storage, etc; and
  - 3) Detailed drawings of each project component as outlined in the Design Report template; and
  - 4) List detailed material specifications for each project component as outlined in the Design Report template; and documentation that all materials used are ANSI, ASME, or NSF approved as appropriate; and
  - 5) Any construction specifications as outlined in the Design Report Template; and
  - 6) Identify testing criteria and procedures for each applicable portion of the project as outlined in the Design Report Template including water quality, water quantity, water pressure in the distribution system; and
  - 7) Identify specific disinfection procedures which must conform with American Water Works Association standards or other standards acceptable by the department; and
  - 8) Evidence that the system is and will remain financially viable, including detailed cost and revenue analysis; and
  - 9) Change orders. All changes except for minor field revisions must be submitted to and approved by the Health Department in writing prior to implementing.
  - 10) For existing non-expanding systems,
    - Written confirmation by the existing connections/users verifying that they are satisfied with the current water quantity, quality and pressure supplied by the existing water system.
    - ii. The Health Department may require additional system tests based on the information provided by the water system owner/manager and/or a facilities site inspection.
- e. Water systems under the jurisdiction of the Health Department, shall submit all required applications, documents, and reports to the Health

Department prior to 1) the installation of any component of a new water system, and/or 2) the installation of water system extension or improvement that would increase the service area or number of service connections, and/or 3) the installation of new equipment to an existing water system, except in the instances of like-for-like replacement parts.

- f. Approval of Design Reports shall be in effect for two years. An extension of the approval may be obtained by submitting a status report, justification, and a written schedule for completion. Extensions may be subject to additional terms and conditions imposed by the Health Department.
- g. A water sampling tap must be installed on the system at a point nearest to the source well, prior to any storage/pressure tanks, and treatment systems.
- h. Water systems approved by the Health Department shall receive the following approval determination.
  - Fully approved/adequate: A fully approved system has been found to be in full compliance with these regulations and may add services if designed accordingly and has the necessary capacity to do so; or
  - 2). Provisionally adequate: A provisionally adequate system complies with applicable water quality standards, treatment standards, fire flow requirements where applicable, meets minimum sanitary and wellhead protection measures at and around the wellhead, and meets a twenty (20) psi minimum pressure under peak hourly design flow conditions but may not be in compliance with other regulatory requirements. A provisionally adequate system is considered satisfactory for its existing services, but may not expand to supply additional services.
- i. Water systems approved by the Health Department, or Department of Health shall maintain a level of service, operation and management, water quality and water quantity that meets public health standards as a condition of ongoing approval to operate as a public water system. Water systems that fail to maintain a level of service, operation and management, water quality and water quantity that meets minimum public health standards shall be determined to be an inadequate water system and deemed to be out of compliance with these regulations.
- j. The water system Design Report must be fully completed by the applicant and approved by the Health Department within three (3) years of the date of submittal. A Design Report that has not been completed and approved within three (3) years shall expire. A new Design Report submittal application shall be required if an existing Design Report has expired.

## F. Distribution Systems

- 1. All distribution reservoirs shall have suitable watertight roof or covers preventing entry by birds, animals, insects, and dust and shall include appropriate provisions to safeguard against trespass, vandalism, and sabotage. All new distribution reservoirs shall be able to be drained by gravity to daylight.
- 2. The water system owner shall ensure that the distribution system is sized and evaluated using a hydraulic analysis acceptable to the Health Department.
- 3. Systems designed to provide fire hydrants shall have a minimum distribution main size of six (6) inches, or meet the sizing requirements of the adopted fire code.
- 4. New water systems or additions to existing systems shall provide a design quantity of water at a positive pressure of at least thirty (30) psi throughout the system at all times as measured at any customer's water meter or at the property line if no meter exists.
- 5. If fire flow is to be provided, the distribution system shall be designed to provide the fire flow volume and maintain a pressure of at least twenty (20) psi throughout the system at all times.

#### G. Disinfection of Facilities

No portion of a public water system containing potable water shall be put into service, nor, if service has been terminated, shall service resume, until the facility has been effectively disinfected. The procedure used for disinfection shall conform to the American Water Works Association standards or other standards acceptable to the Health Department. In cases of new construction, drinking water shall not be furnished to the consumer until bacteriological samples have been analyzed by a laboratory, accredited by the state, indicating satisfactory results.

- H. Water Quality Treatment Methods: Design and Operations
  - 1. Finished water quality from existing and proposed sources of supply shall meet the minimum water quality standards established in this chapter.
  - 2. All proposed water quality treatment methods shall be submitted to the Health Department for approval prior to installation and use.
    - a. Proponent must submit the manufacturer's specifications/documentation for each and every method of treatment. The specifications must demonstrate that the treatment method being proposed is sufficient to meet the demand of the water system and the finished water meets the water quality standards.
    - b. Treatment method may be installed after review and approval by the Health Department.

- c. Proponent shall submit evidence to the Health Department that the treatment method meets the water quality standards at maximum daily demand, prior to final approval by the Health Department.
- 3. Disinfection methods, other than chlorination may be approved by the Health Department /WDOH with appropriate engineering justification.
- 4. The owner shall ensure that the system is operated in accordance with good operating procedures and shall outline those operational procedures in the Design Report as submitted to the Health Department for approval.
- 5. The owner shall ensure that no bypass is established or maintained to divert water around any feature of a treatment process, except by written approval from the Health Department.

### I. Reliability

- 1. All public water systems shall provide an adequate quantity and quality of water in a reliable manner.
  - a. In determining whether a proposed public water system or an expansion or modification of an existing system is capable of providing an adequate quantity of water, the Health Department shall consider the immediate as well as the reasonably anticipated future needs of the system's consumers. The Health Department may limit the expansion of a water system based on the system capacity and potential future demand.
  - b. In determining whether an existing public water system is providing an adequate quantity of water, the Health Department shall consider the needs of the system's existing consumers exclusively, unless, at the Health Department's discretion, consideration of the needs of potential consumers is in the public interest.
  - c. For Group B and Small Group A water systems as defined in this chapter, sanitary surveys shall be conducted in accordance with, but not be limited to, existing Joint Plans of Responsibility with the DOH, Pierce County Code Chapter 8.40 and Chapter 246-290 WAC. The water system shall be responsible for fixing and/or repairing any significant deficiencies identified through the Sanitary Survey process within a timeframe established through discussion between the Health Department and water system.
- 2. The owner shall ensure the system is constructed, operated, and maintained to protect against failures. New and expanding systems shall be equipped with a generator and a generator disconnect. Security measures shall be employed to assure the water source, water treatment processes, water storage facilities, and the distribution system are under the strict control of the owner.
- 3. Where fire flow is required, a positive pressure of 20 PSI shall be maintained throughout the system at all times under fire flow conditions.

- 4. Water pressure at the customer's service meter or property line if a meter is not used, shall be maintained at the approved design pressure and no less than 30 psi.
- 5. No intake or other connection shall be allowed between a public water system and a source of water not approved by the Health Department.
- 6. Owners shall provide the Health Department with the current names, addresses, and telephone numbers of the owners, operators, and emergency contact persons for the system, including any changes to this information.
- 7. The owner shall ensure that customer concerns and service complaints are responded to in a timely manner.
- J. Water Quality Monitoring/Testing/Follow-up
  - 1. General Requirements
    - a. The finished water provided to the water system customers must, at a minimum, meet the water quality standards as provided in Section 14.J 2 and 3, and Tables 1 and 2.
    - b. The Health Department may require additional monitoring when it determines contamination is present or suspected in the water system or when it determines the source may be vulnerable to contamination.
    - c. Special purpose samples may not count toward fulfillment of the monitoring requirements of this chapter.
    - d. The owner shall ensure samples required by this chapter are collected, transported, and submitted for analysis according to the appropriate ANSI or Environmental Protection Agency (EPA) methods. The analyses shall be performed by a laboratory accredited by the State of Washington. Samples collected by the Washington State Department of Health (WDOH) or Health Department staff shall be collected and analyzed consistent with the approved methods adopted by the EPA and/or ANSI.
    - e. When one Group B water system sells water to another public water system and the cumulative number of services or population served meet the definition of a Group A system, the owner of the selling system shall ensure that source monitoring is conducted in accordance with the minimum requirements for Group A community systems found in Chapter 246-290 WAC.

#### 2. Bacteriological

a. Owners shall ensure the collection and submittal of a sample for coliform analysis at least once every twelve months from the furthest end of the distribution system, or as directed by the Health Department.

- b. If bacteria are present in the water quality sample, it shall be determined to be a violation of water quality standards. When coliform bacteria are present in any sample the owner shall ensure that:
  - 1) The sample is analyzed for fecal coliform or E. coli; and
  - 2) The Health Department is notified in accordance with Section 14.K.2.c of this chapter; and
  - 3) The cause of the contamination is determined; and
  - 4) The owner/manager immediately prepares and implements corrective action measures to eliminate the cause of the bacteriological violation; and
  - 5) Further action is taken as directed by the Health Department.
  - 6) Compliance to Public Notification is adhered to.
- c. MCLs.
  - 1) MCLs under this subsection shall be considered primary standards.
  - 2) An MCL violation for coliform bacteria occurs when a routine and repeat sample have coliform present.
  - 3) In determining MCL compliance, the owner shall:
    - i. Include:
      - a) Routine samples; and
      - b) Repeat samples.
    - ii. Not include:
      - a) Invalidated samples; and
      - b) Special purpose samples at the determination of the health officer.
  - 4) Public Notification requirements are adhered to.
- 3. Inorganic chemical and physical.
  - a. Monitoring.

- 1) A complete inorganic chemical and physical analysis shall consist of the primary and secondary chemical and physical standards (Tables 1 and 2 of this chapter).
  - Primary chemical and physical standards include, but are not limited to antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate (as N), nitrite (as N), selenium, sodium, thallium, and turbidity.
  - ii. Secondary chemical and physical standards are chloride, color, hardness, iron, manganese, silver, specific conductivity, sulfate, total dissolved solids, and zinc.
- b. Samples taken for inorganic chemical analyses shall be collected at the source before treatment.
- c. Owners shall ensure submittal of at least one initial complete analysis from each source or well field:
- d. After the initial complete analysis, owners shall ensure submittal to the Health Department of results of at least one nitrate sample analyzed from each source or well field every thirty-six months; and
- e. When treatment is provided for one or more inorganic chemical or physical contaminants, samples shall be taken for the specific contaminant or contaminants before and after treatment. The Health Department shall determine the frequency of sampling.
- 4. Follow-up. When an initial analysis of a substance exceeds the MCL, the owner shall ensure that at least one additional sample is immediately taken from the same sampling point and analyzed for any substance which exceeded the MCL. If the average of the samples exceeds the MCL, a violation is confirmed.

Table 1. Maximum Contaminant Levels (MCLs) allowable for Inorganic Chemicals

SUBSTANCE	PRIMARY MCLs (mg/L)
Antimony	0.006
Arsenic	0.01
Barium	2.0
Beryllium	0.004
Cadmium	0.005
Chromium	0.1
Copper	*
Cyanide	0.2
Fluoride	4.0
Mercury	0.002
Nickel	0.1
Nitrate (as N)	10.0
Nitrite (as N)	1.0
Selenium (Se)	0.05
Sodium	*
Thallium	0.002
SUBSTANCE	SECONDARY MCLs (mg/L)
Chloride (CI)	250.0
Iron (Fe)	0.3
Manganese (Mn)	0.05
Silver (Ag)	0.1
Sulfate (SO4)	250.0
Lead (Pb)	*
Zinc (Zn)	5.0

<sup>\*</sup>An MCL has not been established.

## Table 2: Physical Characteristics – Maximum MCL allowable

SUBSTANCE	PRIMARY MCL
Turbidity	1.0 NTU
SUBSTANCE	SECONDARY MCL
Color	15 Color Units
Hardness	None Established
Specific Conductivity	700 umhos/cm
Total Dissolved Solids	500 mg/L

### 5. Turbidity

a. The Health Department shall determine monitoring requirements on a case-by-case basis. New surface water and GWI sources shall comply with applicable turbidity monitoring requirements in accordance with Part 6 of Chapter 246-290 WAC.

#### b. MCLs.

- 1) The Health Department shall consider standards under this subsection to be primary standards.
- 2) The MCL for turbidity is 1.0 NTU.

#### Follow-up:

When an initial analysis of turbidity exceeds the MCL, the owner shall ensure that at least one additional sample is immediately taken from the same sampling point. If the average of the two samples exceeds the MCL, a violation is confirmed.

#### 6. Other substances

- In areas known or suspected of being contaminated with other substances of public health concern, the Health Department may require that an owner submit water samples to test for the suspected contamination at a frequency determined by the Health Department.
- b. The Health Department may require repeat samples for confirmation of results.
- c. Any substance confirmed in a water system that does not have an MCL listed in this chapter shall be subject to the MCLs determined in other

appropriate state WACs, State Advisory Levels (SALs) or other provisions found in Chapter 246-290 WAC.

d. The health officer may require treatment of the source water.

## 7. General follow-up.

- a. If a water quality sample exceeds any MCLs listed in this chapter, the owner shall ensure notification of the Health Department and take follow-up action as described in this chapter.
- b. When a primary MCL violation occurs, the owner shall ensure that the following actions are taken:
  - 1) Notification of the Health Department in accordance with Section 14.K.2 of this chapter; and
  - 2) Notification of the consumers served by the system in accordance with 14.K.2 of this chapter; and
  - 3) Determination of the cause of the contamination; and
  - 4) Immediately prepare and implement corrective action measures to eliminate the cause of the MCL violation; and
  - 5) Other action as directed by the Health Department.
- 8. When a secondary MCL violation occurs, the owner shall ensure that the Health Department is notified and that action is taken as directed by the Health Department.
- 9. The lack of action taken by a water system owner or manager in the face of an imminent public health threat due to an MCL violation shall be cause for a Health Order to be issued to the water system for corrective action purposes.

## K. Record Keeping and Reporting

- 1. Records of operation and water quality analyses:
  - a. The owner shall ensure that records of bacteriological and turbidity analyses shall be kept for two years and records of chemical analyses shall be kept for five years, unless otherwise determined by the Health Department. Other records of operation and analyses required by the Health Department shall be kept for three years. All records shall bear the signature of the owner of the water system or his or her representative, or by mutual agreement between the Health Department and water system manager or their designee.
  - b. The owner shall ensure that records of action taken by the system to correct violations of primary drinking water regulations and copies of

public notifications shall be kept for two years after the last action taken with respect to the particular violation involved.

- c. The owner shall ensure that copies of any written reports, summaries, or communications resulting from Sanitary Surveys conducted by system personnel, by a consultant or by any local, state, or federal agency, shall be kept for five years.
- d. Where applicable, records of operation and analyses may be required to be submitted to the Health Department. Items that may be required for submittal include the following:
  - 1) Daily chlorine residual, or other scheduled residual monitoring as determined by the Health Department;
  - 2) Water treatment equipment, process, and performance including, but not limited to:
    - i. Type of chemicals used and quantity; and
    - ii. Amount of water treated; and
    - iii. Results of analyses; and
    - iv. Equipment documentation including manufactures specifications and use manuals;
  - 3) Daily turbidity;
  - 4) Monthly water use readings from totalizing source meters; and
  - 5) Other information as specified by the Health Department.

#### Reporting

- a. The owner shall ensure that reports and documents required by this chapter, are submitted to the Health Department when requested by the Health Department or as otherwise required by this chapter, including tests, measurements, and analytical reports, and reports containing the details of system modifications.
- b. Water facilities inventory and report form (WFI).
  - Owners shall ensure the submittal of an updated WFI or written notification to the Health Department every three years or as requested by the Health Department; and
  - 2) The owner shall also ensure the submittal of an updated WFI or written notification to the Health Department within thirty days of any change in name, number of connections, ownership, or

responsibility for management of the water system.

## c. Bacteriological

- 1) When a coliform MCL violation occurs, the owner shall ensure that the following notifications are made:
  - i. Notification of the Health Department before the end of the next business day when a coliform MCL is determined; and
  - ii. Notification of the water system users (public notification) in accordance with this chapter; and
  - iii. Notification of water quality data upon request by the Health Department.

## 2) Public Notification

- i. Notices to the public shall contain
  - a) A clear, concise, and simple explanation of the violation; and
  - A discussion of the potential adverse health effects and any segments of the population that may be of higher risk; and
  - c) A list of steps the owner has taken or is planning to take to remedy the situation; and
  - A list of steps the consumer should take, including advice on seeking an alternative water supply if necessary; and
  - e) The owner's and manager's names and contact phone numbers; and
  - f) When appropriate, the notices shall be multilingual.
- ii. Distribution of the notice for an acute violation must be to all connections to the water system within 48 hours, and for non-acute violations within 15 days unless otherwise determined by the Health Department. As used in this herein, the terms "acute" and "non-acute" shall have the same meaning as defined in WAC 246-290-310.
- iii. When circumstances dictate the owner give a broader or more immediate notice to protect public health, the Health Department may require notification by whatever means necessary.

- iv. When a system is granted a waiver for reduction of water quality standards, the owner shall ensure that customers are notified. The owner shall provide a notice annually and send a copy to the Health Department.
- d. When MCL violations of primary drinking water quality standards are detected, the owner and manager shall follow the public notification process listed in Section 14.K.2.c.2) Public Notification.
- L. Minimum Operation and Management Standards for Public Water Systems

All public water systems under the jurisdiction of the Board of Health shall be managed and operated in a manner consistent with maintaining the following substantive requirements.

1. General Operation and Management

Public water systems under the jurisdiction of the Board of Health shall obtain and maintain an annual water system permit issued by the Health Department.

- a. All changes in management or ownership shall be provided to the Health Department within 30 days of the change.
- b. The water system shall work to maintain financial viability through the collection of funds sufficient to maintain and operate the water system under normal demand and reasonable emergency repair conditions.
- c. The water system shall remain in compliance with the requirements of this chapter, all original conditions of approval, and/or subsequent amended approval conditions. Water systems failing to maintain the conditions of approval, or have an identified "Significant Deficiency" shall be deemed an inadequate water supply, out-of-compliance with the approval requirements, and are subject to enforcement measures provided for in Chapter 1 of the Environmental Health Code.
- d. Unsatisfactory bacteria test results and chemical MCL violations shall be reported, by the certified testing laboratory and the water system, to the Health Department within 24 hours of completing the testing method or receiving the test results.
- e. Pursuant to RCW 43.20.240 complaints regarding the operation, maintenance, water quality or water quantity shall be addressed within a reasonable time frame to address public health. The water system owner or manager shall confer with Health Department to establish a timeline and plan of action to resolve complaints.
- f. For those water systems under the jurisdiction of the Health Department, Action Plans or amendments to approved Design Reports shall be developed by the water system owner, manager, or certified operator and

submitted to the Health Department for approval if the water system must repair or replace all or part of the system infrastructure due to water quality problems, infrastructure failure, or system expansion. Exceptions to this requirement will be made for routine maintenance and emergency repairs.

g. In accordance with the provisions of RCW 70.119A.150, if water systems under the jurisdiction of the Health Department fail to perform the required bacteriological or nitrate analysis within six (6) months after the due date of the analysis, the health officer may sample and perform either or both of these analyses and charge a fee for service in accordance with the fees established by the Board of Health.

Additional physical, chemical, or biological tests may be performed by the Health Department at the direction of the health officer through lack of action by the water system owner or manager, or in the event of an actual or suspected contaminated water supply.

h. For those water systems under the jurisdiction of the Health Department failing to correct a "Significant Deficiency" the health officer may issue a Health Order directing the water system to correct the Significant Deficiency within a selected time frame.

The Health Department may impose and collect penalties as provided in Chapter 1: Enforcement.

- i. The Health Department may record a notice on each of the properties served by the water system, indicating that the property is served by a water system that does not meet minimum health standards, if the system fails to meet the requirements of this section and/or has ongoing problems as listed in Section 14.L.1.k, 1) through 3).
- j. Health Department water system operator's certification.
  - 1) The Health Department may implement a local water system operators certification program pursuant to RCW 70.05.060, Powers and Duties of the Local Board of Health.
  - The Health Department Water System Operators Certification Program shall consist of education, testing, and certification of a representative from all Group B water systems.
  - 3) The certification shall expire three (3) years from the date of issuance.
  - 4) At the determination of the health officer, a Group B water systems shall be required to have a Health Department certified operator owning, managing or employed to operate each system. Evidence of meeting this requirement shall be submitted to the Health Department in written form.

- 5) Requirements for the water operator's certification shall be waived for those water systems currently owned or managed by a SMA that meets the requirements of Section 14.L.2., and those water systems serving 2 residential connections.
- k. Existing public water systems under the jurisdiction of the Board of Health with ongoing operational, managerial, and/or water quality problems that pose a threat to public health may be required to be managed and operated by an SMA or be subject to receivership pursuant to RCW 43.70, and Pierce County's Coordinated Water System Plan. These problems may include but not be limited to the following.
  - Documented ongoing funding problems that cause the water system to fall out of compliance with state and local drinking water regulations.
  - 2) Documented ongoing water system infrastructure problems that result in any of the following: loss of water, a significant decrease of water pressure, a significant loss of water volume available to the system connections, or significant delays in the replacement of parts critical to the proper operation of the water system which is meant to prevent adverse impacts to public health.
  - 3) Documented ongoing poor operation and management of the water system to include, but not be limited to:
    - i. Failure to collect water quality samples
    - ii. Failure to address ongoing water quality problems
    - iii Failure to repair system leaks, backflow connections, or other system problems that would potentially cause pathogens to enter into the water system.
- Water System Management by a Satellite Management Agency (SMA)
  - a. All new public water systems under the jurisdiction of the Board of Health shall be managed and operated by an approved SMA, except those water systems serving two (2) residences as approved by the Health Department. Water systems may be owned, or managed and operated by an approved Group A water system within whose service area it is located. If a SMA is unwilling to manage and operate the water system, then the water system shall contract with a Washington State certified water system operator to operate the water system.
    - Contracts between the water system owner(s) and an approved Satellite SMA shall be maintained and shall include, but not be limited to, the following items;

- i. Provisions to take water quality samples to meet state and local water quality monitoring requirements; and
- ii. Provisions to collect funds sufficient to manage the financial needs of the water system, including the payment of all fees necessary to maintain compliance with drinking water regulations; and provisions for the collection of unpaid funds; and
- iii. Provisions to deal with emergencies that impact water supply or water quality; and
- iv. Provisions to provide regular and timely ongoing system maintenance; and
- v. Any management and operations process or procedure as determined by the Health Department necessary to provide a safe and reliable supply of drinking water.
- b. SMA's owning, operating or managing a water system shall maintain a level of service equivalent to, or greater than, the provisions outlined in paragraph 14.L.2.a.1, above.
  - 1) A contract between the water system owner(s) and the contracted SMA shall not be altered, interrupted, suspended or ended without prior Health Department notification.
    - i. In those instances where the contract between a water system owner(s) and SMA will end, the contract must remain in force until such time as the water system owner(s) have entered into a new contract that meets the minimum contract standards listed in Section 14.L.2.a.
    - ii. An exception will be made in those instances where the SMA or Certified Operator has ceased management and/or operation as the result of lack of payment or other significant breach of contract by the water system owners.
  - 2) Water systems whose SMA contracts lapse, expire, or are no longer in affect will be determined to be in violation of this chapter and deemed an inadequate water supply.
  - 3) When management of a water system by a SMA is required, a copy of the contract between the water system owner and SMA shall be submitted to the Health Department for review and approval. Review of the contract by the Health Department will be limited to verifying the presence of the minimum contract requirements found in Section 14.L.2.a. New water systems shall not be put into service prior to the review and approval of the SMA by the Health Department.

- 4) Those systems required to contract with an SMA due to potential health threats based on those items listed in Section 14.L.1.k, 1) through 3), but fail to do so, shall be determined to be in violation of this chapter and be subject to the enforcement provisions of Chapter 1 of the Environmental Health Code.
- 5) SMA's who do not fulfill their contractual requirements, or do not meet the standards set forth in Chapter 246-295 WAC, or the requirements of this chapter, any of which result in potential health risks to the users, shall be referred to the WDOH for enforcement actions, and/or be subject to the enforcement options as listed in Chapter 1 of the Environmental Health Code.

#### 3. Cross-Connection Control

- a. Owners have the responsibility to protect public water systems from contamination due to cross connections.
- b. Cross-connections which can be eliminated shall be eliminated. The owner shall work cooperatively with local authorities to eliminate or control potential cross-connections in a manner acceptable to the Health Department.
- c. When an existing cross-connection poses a potential health or system hazard, the owner shall shut off water service to the premises until the cross-connection has been eliminated or controlled by the installation of a proper backflow protection.
- d. Backflow prevention devices shall be approved by the WDOH and tested in a manner prescribed by the WDOH in Chapter 246-290-490 WAC.

#### 4. Water Availability Letters

- a. If a building site, land development, land use application, or public gathering will rely on a public water system as the source of drinking water, then the applicant must obtain a valid Water Availability Letter from that system. The Water Availability Letter must be specific to the site, parcel(s), Equivalent Residential Units (ERU) or buildings designated on the application to the Health Department. A copy of the Water Availability Letter must be provided to the Health Department. A valid Water Availability Letter from a public water system is a representation that:
  - A Group A water system commits to provide the proposed use no less than the system's maximum daily demand per day for each unit or use proposed; and
  - 2) A Group B water system commits to provide each lot connection or use with no less than 750 gallons of water daily; and

- Connections indicated on the Water Availability Letter do not exceed the maximum number of connections approved by either the WDOH or Health Department; and
- 4) The water system has the current and future capacity, through water rights and infrastructure to deliver the water to the proposed site, without setting undo conditions for service; and
- 5) The water system is currently in compliance with state and local public water system regulations, and is complying with any additional conditions of approval required by either the WDOH or Health Department; and
- 6) The water system is not in violation of any water quality standards adopted by this chapter.
- b. The water system shall not issue a water availability letter for those sites outside of their approved water system service area unless specifically authorized by either the WDOH or Health Department.
- c. If the Health Department approves a water system or water adequacy in reliance upon a Water Availability Letter (WAL), then neither the applicant nor the water purveyor may terminate the water system's service commitment within the time limit noted on the WAL without prior, written approval of the Health Department. The purveyor may, however, suspend service for cause such as failure by the customer to pay for the agreed water connection services. Notification of service suspension shall be provided to the customer and the Health Department in written form.
- d. A Water Availability Letter shall be considered valid if the provisions of Sections 14.L.5, a. and b. have been met.
- e. The Health Department may rescind approval for water adequacy based on a water availability letter if, in the determination of the health officer, the water availability letter does not accurately reflect the condition of the water system, or the water availability letter was falsely submitted, or if conditions initially indicated on the water availability letter change. The water purveyor may notify the Health Department in writing of the conditions that impact the water availability letter, and may request that the letter be rescinded.
- f. Commitment to serve water to a lot(s) or building shall not be revoked by the water purveyor after the lot has been created or building permit issued. The purveyor may suspend service for causes that include, but are not limited to, failure by the customer to pay for the agreed water connection services, or if the customer allows or installs an unauthorized service connection to the system. Notification of service suspension shall be provided to the customer and the Health Department in written form.

Suspension of service for cause shall result in the revocation of water adequacy approval associated with the permit for which the original water availability letter was issued.

- 5. Inactivation and Reactivation of a Public Water System
  - a. For those systems under the jurisdiction of the Health Department, inactivation of a public water system may occur when a water system meets one or more of the following criteria:
    - The water system no longer meets the definition of a public water system as defined in Chapter 246-290 or Chapter 246-291 WAC; or
    - 2) The water system is integrated into another water system and is operated and managed in its entirety as part of a combined single larger water system.
  - b. Submittal requirements for those systems under the jurisdiction of the Health Department.
    - The water system shall supply written documentation that the original water system connection(s) is/are no longer part of the water system that is undergoing inactivation. Documentation shall be either in the form of "verification of connection" letters from alternative water systems for each of the remaining connections, documentation that the original connections no longer exist or the system is not used for potable purposes, or documentation that each of the original connections are being served by an individual well.
    - 2) A request, in writing, by the owner or authorized manager of the water system requesting inactivation of the water system in the Health Department records.
    - In the instances where a water system wishes to cease operating as a public water system and has not connected to another approved water system, but there are current residences or business connected to the system, the water system must provide evidence to the Health Department that it has provided all residences or businesses connected to the water system with at least one (1) year written notice of the inactivation of the water system.
    - 4) Evidence that all contractual requirements entered into by the water system for water supply have been met.
  - c. Inactivation Acknowledgement by the Health Department.

Acknowledgement of the inactivation of a water system will occur when all of the conditions and requirements in Sections 14.I.6, a. and b. have been met. Until such time as those conditions have been met, the Health Department will consider the water system active and shall enforce the appropriate public water system regulations.

- d. Reactivation of a water system.
  - Reactivation of a water system occurs when a person wishes to bring an inactivated water system into service as a fully functioning public water system.
  - 2) Health Department approval of a reactivated water system requires the following:
    - i. Obtain an annual water system permit issued by the Health Department; and
    - ii. Completion of a sanitary survey by Health Department staff; and
    - iii. The water system must meet the requirements for public water systems as required by this chapter, including but not limited to: water quality, water quantity, storage, system pressure, etc.
- 6. Termination of a Service Connection by a Public Water System
  - a. Water systems wishing to permanently terminate one or more service connections must provide at least one year written notification to the Health Department concurrent with the notification of termination to the service connection whose water supply will be permanently terminated.
  - b. The Health Department reserves the right to deny water service termination if, in the opinion of the health officer, a public health threat will occur as a result of such action.
  - c. Until such time as conditions Section 14.L.6, a. and b. have been met, the Health Department will consider the connection active and shall enforce the appropriate public water system regulations.

## 7. Continuity of Service

a. No owner shall transfer system ownership without providing written notice to the department and all customers. Notification shall include a time schedule for transferring responsibilities, identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered agent shall also be provided.

- b. The water system transferring ownership shall ensure all health-related standards are met during transfer and shall inform and train the new owner regarding operation of the system.
- c. No owner shall end utility operations without providing written notice to all customers and the Health Department at least one year prior to termination of service.
- d. Nothing in these regulations shall prohibit a water system from terminating service, either permanently or temporarily, to a specific customer if the customer fails to pay normal fees for service in a timely manner, if the customer allows or installs an unauthorized service connection to the system, or if the customer modifies the water system in such a manner to pose a threat to the water system operation and/or public health and safety.
- e. Where this chapter may be in conflict with existing state statutes, the more stringent statute shall control.

# **SECTION 15: Adequate Water Supply**

### A. Applicability

All building, land use, and public gathering or commercial business applications, within the jurisdiction of the Board of Health, must demonstrate that an adequate water supply can be provided for the proposed application. In order to determine if an adequate supply of drinking water is available to meet building, land use permitting and public health requirements the following requirements must be met.

- B. On-site Sewage System Application New Site Development
  - 1. Water Supply: Public Water Systems
    - Applicant shall submit a valid water availability letter from the public water system that will be providing the water supply to the property. The water system must meet the definition of an Adequate Water Supply and not have a Significant Deficiency; and
    - b. If a public water system well is within 200 feet of any of the components of the proposed New Site Development, then the well and it's Sanitary Control Area must be shown on the application drawing.
  - 2. Water Supply: Individual Wells
    - a. Provide evidence that the well site and construction have been approved to meet the requirements of this chapter; and
    - b. Provide evidence that the water supply meets water quantity and quality standards as required in this chapter.

C. On-site Sewage System Application – Modification of Existing On-site Development

The following requirements must be met in those instances where, due to the proposed land use, there will be an increase in the amount of waste water generated, an increase in the amount of water supply, an increase in the footprint of any structure that would impact the current water supply to the site, or there will be a change to the water supply to the site. The application must show the name and identification of the water supply.

- 1. Water Supply: Public Water Systems
  - a. The water system must currently be in compliance with state and local public water system regulations and the modification to existing on-site development activity will not impact the water system; and
  - The water system must have the capacity to serve the land use proposal;
     and
  - c. If a public water system well is within 300 200 feet of any of the components of the proposed modification to existing on-site development, then the well and it's Sanitary Control Area must be shown on the On-site application drawings.
- 2. Water Supply: Individual Wells
  - a. Provide evidence that the onsite septic system will not have an adverse impact on the well-water source and its' Sanitary Control Area; and
  - b. Source
    - 1) For those modifications to existing on-site development where there is:
      - A change in building footprint or increase in square footage of a structure served by an OSS which does not result in an expansion or increased flows; or
      - ii. An outbuilding or structure is not served by an OSS; or
      - iii. A connection of a non-residential structure to an existing OSS does not result in expansion or increased flow;

Then the applicant must provide a bacteriological water quality sample result that is less than one (1) year old, and a nitrate water quality sample result that is less than three (3) years old that meet the water quality standards of this chapter.

2) For those modifications to an existing on-site development not meeting the criteria listed in Section 15.C.2.b.1) i through iii:

- i. Applicant must provide a bacteriological water quality sample result that is less than one (1) year old, and a nitrate water quality sample result that is less than three (3) years old. The water quality must meet this chapter's water quality standards; and
- ii. Applicant is subject to a water source evaluation that includes a well site inspection; and
- c. If a modification to an existing on-site development is proposed, all water line(s) and any well(s) that are located on the property or within 100 feet of the property line shall be shown on the application drawings along with any Sanitary Control Area
- D. Onsite Sewage System Applications Failures and Repairs
  - 1. Water Supply: Failing On-site Sewage System

Water Supply Approval - Failing Systems

At the discretion of the health officer, approval granted by the Health Department to repair a failing septic system with surfacing sewage may be allowed prior to water supply adequacy approval. Prior to final approval, the water system must meet the requirements of Section 15.B or C as appropriate. However, the repair components shall not be located any closer to a water well than the existing onsite septic system components.

- 2. Water Supply: Repair of On-site Sewage System
  - a. Public Water Systems
    - 1) For properties served by Group A and Group B water systems:

Applicants must provide the name and Washington State Identification number of the public water system.

- 2) For properties served by a Group B water system:
  - Applicant must provide evidence that the property is an approved connection to the water system identified on the application forms; and
  - ii. Water system must be in compliance with the requirements of this chapter and for public water systems requirements.
- 3) Provide evidence that the drainfield repair will not have an adverse impact on the well-water source and its' Sanitary Control Area.
- b. Individual Wells

- 1) Applicant must provide a bacteriological water quality sample result, that meets this chapter's water quality standards, that is less than one (1) year old, and a nitrate water quality sample result that is less than three (3) years old; and
- 2) Provide evidence that the drainfield repair will not encroach into the well's 100 foot protective radius; and
- 3) Show the 100 foot well protective radius on the design drawings.

## E. Accessory Dwelling Unit (ADU)

All applications for Accessory Dwelling Units (ADU) within the jurisdiction of the Board of Health shall meet the following requirements.

- 1. Water Supply: Public Water System
  - Submit a valid Water Availability Letter from a public water system that meets the requirements of this chapter. The Water Availability Letter must clearly indicate that the ADU is a separate connection to the water system; and
  - b. Submit a site plan that clearly shows the location of the ADU and all other structures located on the parcel where the ADU is to be located.
- 2. Water Supply: Individual Well
  - a. Submit applications for the siting and construction requirements of this chapter for new or existing wells; and
  - b. Well siting, construction, water quality and water quantity shall meet the requirements of this chapter, and flow test information, less than 3 years old, must provide evidence that the well can provide at least 5 gpm per residence. Water sources that supply less than five (5) gallons per minutes per residence shall meet the water storage requirements of Section 12;
- 3. ADU Water Supply Approval

Water supply approval will be granted for an ADU when the substantive requirements provided in Section 15.E.1 or 2, as applicable, and their associated requirements, have been met.

F. Mother-in-Law Residential Unit or Temporary Hardship Housing

All applications for Mother in Law Residential Units (MIL) /Temporary Hardship Housing, as defined by Pierce County Code 18.25.030, within the jurisdiction of the Board of Health shall meet the following requirements.

- 1. Water Supply: Public Water System
  - a. Submit the name and Identification Number of the water system serving the MIL residential unit; and
  - b. Submit valid documentation from the water system granting approval for the MIL connection to the water system, (Group B only); and
  - c. The water system must be in compliance with the water quality standards for public water systems.
  - d. Submit a valid copy of the County's MIL affidavit/Hardship Affidavit
- 2. Water Supply: Existing Individual Well
  - a. Applicant must provide a bacteriological water quality sample result, that meets this chapter's water quality standards, that is less than one (1) year old, and a nitrate water quality sample result that is less than three (3) years old; and
  - b. Submit an accurate site plan to show well, main residence, and MIL unit; and
  - c. Submit a valid copy of the County's MIL affidavit.
- 3. Water Supply: New Individual Well
  - a. Submit applications for the siting and construction requirements of this chapter for new wells; and
  - b. Well siting, construction, water quality and water quantity shall meet the requirements of this chapter; and
  - c. Submit a valid copy of the County's MIL affidavit.

## G. Adult Family Homes

1. Applicability

The water supply for "Adult Family Homes" within the jurisdiction of the Board of Health shall meet the following requirements.

- 2. Pursuant to Chapter 388-76-10790 WAC, Adult Family homes must receive water adequacy approval from the local health authority. Adult Family Homes shall be served by an approved public water system.
  - a. Applicant must submit a water supply adequacy application with appropriate fee at the time of licensing and license renewal by the appropriate state or local agency; and

- b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c. must be submitted to the Health Department as proof of connection to a public water system.
- H. Child Care Businesses and In-Home Daycare Facilities
  - 1. Applicability

The water supply for "Child Care Businesses" and "In-Home Daycare Facilities" within the jurisdiction of the Board of Health shall meet the following requirements.

- 2. All Child Care Businesses and In-Home Daycare Facilities shall be served by an approved public water system.
  - a. Applicant must submit a water supply adequacy application with appropriate fee at the time of licensing and license renewal by the appropriate state or local agency; and
  - b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the as proof of connection to a public water system.
  - c. Proponent may establish a new public water system to meet the water service requirement of this section.
- I. Boarding Homes
  - 1. Applicability

The water supply for Boarding Home, as defined by Chapter 388-78A WAC, within the jurisdiction of the Board of Health shall meet the following requirements.

- 2. All Boarding Homes shall be served by an approved public water system pursuant to Chapter 388-78A-2960 WAC.
  - Applicant must submit a water supply adequacy application with appropriate fee at the time of licensing and license renewal by the appropriate state or local agency; and
  - b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the Health Department as proof of connection to a public water system.
- J. Temporary Worker Housing
  - 1. Applicability

The water supply for Temporary Worker Housing, within the jurisdiction of the Board of Health, shall meet the following requirements.

- 2. All Temporary Worker Housing consisting of two (2) or more units shall be supplied water from an approved public water system.
  - a. Applicant must submit a water supply adequacy application with appropriate fee; and
  - b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the Health Department as proof of connection to a public water system.

#### K. Transient Accommodations

1. Applicability

The water supply for Transient Accommodations, within the jurisdiction of the Board of Health, shall meet the following requirements.

- 2. All Transient Accommodations shall be supplied water from an approved public water system.
  - a. Applicant must submit a water supply adequacy application; and
  - b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the Health Department as proof of connection to a public water system.

### L. Recreational Vehicle Park

1. Applicability

The water supply for Recreational Vehicle Parks, within the jurisdiction of the Tacoma-Pierce County Board of Health, shall meet the following requirements.

- 2. All Recreational Vehicle Parks shall be supplied water from an approved public water system.
  - a. Applicant must submit a water supply adequacy application with appropriate fee; and
  - b. A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the Health Department as proof of connection to a public water system.

#### M. Schools

1. Applicability

The water supply for public and private schools, within the jurisdiction of the Board of Health, shall meet the following requirements.

- 2. All schools shall be supplied water from an approved public water system that meets the adequacy requirements of this chapter.
  - a. Applicant's for all new schools, or school expansions, or school remodels that would require the review and approval of the Health Department's Food and Community Safety Program must submit:
    - 1) A water supply adequacy application with appropriate fee; and
    - 2) A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c.
- 3. All public water systems whose primary customer is a school shall have the water system inspected once each year before the fall opening of school. The water system shall enter into an agreed upon schedule for the annual inspection by the Health Department.

At the determination of the health officer, an annual inspection may be waived based on the results of previous inspections and appropriate ongoing system management.

- a. The water system shall supply the Health Department with the appropriate water system documentation and inspection fee prior to system inspection.
- b. System structural, operational, management, and/or water quality problems will be cause for the water system and the Health Department to enter into an agreed plan and time period to correct the problems, and shall be addressed to the satisfaction of the health officer. Water systems failing to enter into such an agreement or failing to complete the necessary corrective measures shall be subject to all enforcement procedures available in Chapter 1 of the Environmental Health Code.
- c. The health officer may impose additional restrictions and or requirements on school operations based on the result of an annual inspection with findings that may negatively impact public health. Those findings may include, but are not limited to, poor water quality, or water system operation or management problems. A list and description of the inspection results, and any necessary corrective actions, shall be provided to the water system and school district.

## N. Camps and Campgrounds

1. Applicability

The water supply for Camps and Campgrounds, within the jurisdiction of the Board of Health, shall meet the following requirements.

- 2. All Camps, Campgrounds, and Camping Sites shall be supplied water from an approved public water system.
  - a. New Camps, Campgrounds, and Camping sites must submit, to the Health Department as proof of connection to a public water system, a valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c.; and
  - Each Camp, permitted by the Health Department, is subject to an annual inspection of the water system that provides potable water to that camp; and
  - c. Each Camp must pass the annual water system inspection prior to receiving a permit or license, or permit or license renewal, from the Health Department; and
  - d. The health officer may impose additional restrictions and or requirements on the Camp operations based on water quality and/or quantity sample test results or water system operations that may impact public health; and
  - e. In accordance with RCW 70.119A.150, Campgrounds and/or Camping sites may be subject to annual inspection if the health officer has determined that the water system serving these sites poses a public health risk. A written description of the health officer's determination of risk, and any corrective actions, shall be provided to the campground and/or camping sites owner/manager.
- O. Temporary Events and Temporary Housing Communities
  - 1. Applicability

The water supply for Temporary Events and Temporary Housing Communities, within the jurisdiction of the Board of Health, shall meet the following requirements.

- 2. All Temporary Events and Temporary Housing Communities shall be supplied water from an approved public water system.
  - a. Applicant must submit a water supply adequacy application and appropriate fee and for:
    - 1) Direct Connections to the water system:

A valid water availability letter, from a public water system that meets the requirements of Section 14.L.5. a. through c., must be submitted to the Health Department as proof of connection to a public water system; or

- 2) Use of a storage tank (importing water to the event or housing site):
  - i. Provide written acknowledgement and approval from the water system that will be providing the potable water; and
  - ii. Provide evidence that the storage tank and associated water supply equipment (piping, faucets, etc.) are NSF approved or of food storage grade, and used only for the transport and/or storage of potable water; and
  - iii. Water in storage tanks are subject to an initial bacteria test and daily chlorine residual tests that meet public health safety standards. An additional bacteria test shall be conducted for each storage tank each week the event or housing community exists; and
  - iv. Applicant must provide the Health Department with a written plan to manage the stored water supply, including: water source, transport, volumes, treatment and method of reporting; and
  - v. The water management plan must be approved by the Health Department no less than 48 hours prior to the beginning of the event or construction of the temporary housing community; and
  - vi. The site and water supply facilities are subject to inspection and an as-built approval.
- 3) Bottled Water

In order for the Health Department to approve bottled water as a source of potable drinking water, the requirements of Section 15.R, Bottled Water and 5.B.6) Drinking Water Source, must be met.

- b. Approval by the Health Department for an event or temporary housing community is valid for only one event or housing community; and
- c. Failure to comply with any of the conditions set forth in Section 15.O.2 of this chapter shall be cause to revoke the water supply approval, or any or all of the following:
  - 1) Require additional water quality monitoring
  - 2) Require the use of an alternate water supply
  - 3) Restrict the use of the water supply

#### P. Food Establishments

## 1. Applicability

The water supply for food establishments, within the jurisdiction of the Board of Health, shall meet the following requirements.

## 2. Requirements

All food establishments, as defined in Chapter 246-215 WAC, shall be supplied water from an approved public water system.

- a. All food service establishments must receive water adequacy approval from the Health Department prior to receiving a Food Establishment Permit from the Health Department.
  - 1) The food service establishment must receive water adequacy approval at the initial time of opening.
  - 2) The food service establishment must receive water adequacy approval at the time of each Health Department Food Service Establishment Permit annual renewal period.
- Applicant must submit a water supply adequacy verification application with appropriate fee to the Health Department Drinking Water Program for review and approval; and
  - 1) A valid water availability letter from a public water system, serving the facility, which meets the requirements of Section 14.L.5. a. through c.; or
  - 2) A current water utility bill for the facility location; or
  - 3) A valid signature from the water purveyor on the Health Department's Food Establishment Water Adequacy Verification form.

#### 3. Denial of Permit

The Health Department may not approve water adequacy for a food establishment served by a water system that is out of compliance with state or local public water system regulations.

#### Q. Bed and Breakfast Operations

## 1. Applicability

The water supply for bed and breakfast operations, within the jurisdiction of the Board of Health, shall meet the following requirements.

## 2. Requirements

All bed and breakfast operations, as defined in Chapter 246-215 WAC, shall be supplied water from an approved public water system.

- a. All bed and breakfast operations must receive water adequacy approval from the Health Department prior to receiving a bed and breakfast operation permit from the Health Department.
- b. Applicant must submit a water supply adequacy verification application with appropriate fee; and
  - 1) A valid water availability letter from a public water system, serving the facility, that meets the requirements of Section 14.L.5. a. through c., or
  - 2) A current water utility bill for the facility location; or
  - 3) A valid signature from the water purveyor on the Food Establishment Water Adequacy Verification form.

#### R. Bottled Water

- 1. Bottled water may be approved for use as an adequate water supply, as required in this chapter, only when:
  - a. Public water is not currently available to a site or facility and either:
    - 1) Food Service Establishment Permit is not required; or
    - 2) An on-site sewage system is not required for use as sewage disposal, or
    - 3) The event is not commercial in nature (private event not open to the public).
- 2. The Health Department may not approve bottled water as a permanent source of potable water.
- 3. Bottled water shall meet the requirements outlined in Chapter 246-290-130 (9) (a) through (e) WAC.
- S. Water Supply for the Subdivision of Land: Platting, Planned Development Districts (PDD), Planned Unit Developments (PUD), Binding Site Plans (BSP), and Boundary Line Adjustments (BLA)

The water supply for plats, Planned Development Districts (PDD), Public Unit Developments (PUD), Binding Site Plans (BSP) and Boundary Line Adjustments (BLA) to be created within the jurisdiction of the Tacoma-Pierce County Board of Health shall meet the following requirements.

#### 1. Plats:

Preliminary Approval - Water Supply

The purpose of the Health Department's water supply review process for a Preliminary Plat is to determine the feasibility of the plat receiving an adequate water supply. The preliminary review is for feasibility only, not for final plat approval.

- a. Water Supply: Group A and Group B Public Water Systems
  - 1) Provide the name and Washington State identification number of the proposed water source on the plat application; and
  - 2) If a public water supply well will be located within the plat boundary, a minimum 100 foot protective well radius must be shown on the face of the plat map. The Health Department may require a larger protective radius as necessary to address current or potential physical, chemical, or biological impacts to the well; and
  - 3) If the plat is located within the service area of a Group A water system, and is to be served by a new Group B water system, then the proposed Group B must receive approval by the respective Group A water system. Evidence of that approval must be provided to the Health Department in written form. The Health Department may not approve a new Group B or Group A water system within the service area of an existing Group A water system if that approval violates state law; and
  - 4) For applicants proposing to use a Group B water system as a water source; the well with its 100 foot protective radius must be shown on the face of the plat, submitted to the Health Department for review and site inspection, and approved by the Health Department; and
  - 5) The public well site location must meet setback requirements of this chapter, Chapter 246-290 WAC, Chapter 246-291 WAC, or Chapter 173-160 WAC, whichever is determined to be more protective of public health.
- b. Water Supply: Individual Well or Wells
  - 1) A 100 foot protective-radius circle shall be located on the face of the plat map for each well proposed for water supply. The 100 foot circles shall be centered on the proposed individual wells; and

- 2) The Health Department may not approve more wells as potential sources of water for a building permit, land subdivision, project or other use than the applicant has water rights; and
- 3) The Health Department may not approve wells that would withdraw a total number of gallons that exceeds the group exemption of 5,000 gallons per day unless the applicant has valid water rights to withdraw more than that allowed by the group exemption of 5,000 gallons per day; and
- 4) The Health Department shall use 400 gallons per day for each individual well to calculate the number of lots that can be approved; and
- 5) Individual wells proposed for a plat shall be subject to site inspection prior to preliminary plat approval.
- c. Water Supply: Combination of Public Water System and an Individual Well or Wells
  - 1) Group A Public Water System

The Health Department may not approve a combination of individual wells and a Group A public water system as the water supply unless the Group A water system grants approval in writing. Individual wells used in this combination are subject to the 5,000 gallon per day exemption requirements (RCW 90.44.050). The Health Department may not approve a new individual well within the service area of a Group A water system if that approval violates state law.

2) Group B Public Water System

The Health Department may approve any number of lots using a combination of Group A and Group B water system connections to serve as a water supply with the following limitations.

- No more than 6 lots may be connected to a Group B water system without having the appropriate water rights to serve the lots.
- ii. Only one Group B Water System can be utilized to act as a water supply for a plat.
- iii. If a new Group B water system will be created to provide water to the plat, then the public water system shall meet the substantive requirements of this chapter.

- iv. Any combination of individual wells and Group B water system connections may be used to provide water to the proposed lots subject to the 5,000 gallon per day group water right exemption.
- v. The Group B water system must meet the water availability standards in Section 14.L.5. a. through c.
- 2. Plats: Final Approval Water Supply
  - a. Final plat approval shall meet the following requirements
    - 1) All plats shall meet the requirements of Section 15.S.1. a. through c. as appropriate.
    - 2) Plats using a Group A Water System as the source of water supply:

A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c., including the final plat signature line signed by the water purveyor, must be submitted to the Health Department as proof of connection to a public water system.

- 3) Plats using a Group B Water System as the source of water supply:
  - i. The water system must have final system approval as required under Section 14 of this chapter; and
  - ii. All easements and components of the water system must be shown on the face of the plat, including but not limited to the well, storage structures and water lines.
- 4) Plats using Individual Wells as the source of water supply;

Each well located on the plat must meet the siting restrictions of this chapter and pursuant to Pierce County Critical Areas requirements. Evidence of meeting Critical Area requirements must be provided to the Health Department by submittal of the Critical Areas Checklist approval documentation from Pierce County Planning and Land Services.

- 5) All conditions of approval have been placed on the face of the plat as Health Department Notes.
- 6) All wells located within the boundary of the plat must be decommissioned prior to final plat approval unless the existing well will be part of the water source and/or supply infrastructure of the water system serving the plat. Existing wells may be used for

a non-potable purpose contingent upon approval by the water system serving the plat and the Health Department. In order for the Health Department to approve the existing well as a non-potable water source, the applicant must demonstrate 1) the well's construction meets current well sealing standards, 2) the well does not pose an adverse impact to existing water wells, and 3) the well does not pose a threat to existing groundwater quality. Additionally, the applicant must demonstrate that water rights exist to meet the proposed use, or demonstrate that the use will meet the water right exemption.

## 3. Boundary Line Adjustments (BLA)

In order for the Health Department to approve a water supply for a BLA the following requirements must be met.

a. Public Water Supply

Applicants using a public water supply shall provide the following:

- A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c must be submitted to the Health Department as proof of connection to a public water system for all lots addressed by the BLA. The "final" signature line must be signed by the water purveyor; or
- 2) A current water bill showing the address and parcel number of the lots shown on the BLA, and the water purveyors verification letter indicating connection to the public water system; and
- 3) Evidence that the public water system providing water to site must be in compliance with state and local public water system regulations.
- 4) All existing components of the water supply for each resulting lot must be shown on the site map; including well, pumphouse, waterlines, and water storage structures.
- 5) All lots resulting from the BLA process shall demonstrate an approved water source.

#### b. Individual Wells

Applicants using individual wells as a water supply shall provide the following:

1) If proposed BLA does not impact the existing individual wells or their 100 foot protective radii, no further review is required.

- Where no wells currently exist, or wells and or well protection radii are impacted, the proposal is subject to Items 2 7 below.
- 2) For lots that are less than one acre in area, the applicant must provide justification that a well site is feasible for placement on the lot; and
- 3) Provide a site plan or site diagram showing the location of septic system components, building footprints, easements and any other building or legal restriction that would not allow a well to be drilled on the lot; and
- 4) Provide protective covenant documents created to protect the well from existing and potential sources of contamination, and show the Sanitary control Area on the site map.
- 5) The applicant shall provide written documentation to the Health Department that the wells shown on the Boundary Line Adjustment map can both physically be placed at the location indicated on the lots and meet the siting requirements of this chapter.
- 6) The Health Department shall not approve an individual well as a water source if one or more of the resulting lots whose boundaries have been modified through the BLA process cannot accommodate required setbacks, or establish easements and/or covenants.
- 7) All lots resulting from the BLA process shall demonstrate water source feasibility.
- 4. Planned Development District (PDD)

Final Water Supply Approval

- A valid water availability letter from a public water system that meets the requirements of Sections 14.L.5. a. through c. must be submitted to the Health Department as proof of connection to a public water system. The "final" signature line must be signed by the water purveyor.
- b. The water availability letter must reflect the number of connections and/or ERUs for final build out of the PDD.
  - c. All wells located within the boundary of the PDD must be decommissioned prior to final PDD approval unless the existing well will be part of the water source and/or supply infrastructure of the water system serving the PDD. Existing wells may be used for a non-potable purpose contingent upon approval by the water system serving the plat and the Health Department. In order for the Health Department to approve the existing well as a non-

potable water source, the applicant must demonstrate that 1) the well's construction meets current well sealing standards, 2) does not pose an adverse impact to existing water wells, and 3) does not pose a threat to existing groundwater quality. Additionally, the applicant must demonstrate that water rights exist to meet the proposed use, or demonstrate that the use will meet the water right exemption.

### 5. Planned Unit Development (PUD)

- a. Final Water Supply Approval
  - A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c. must be submitted to the Health Department as proof of connection to a public water system. The "final" signature line must be signed by the water purveyor.
  - 2) The water availability letter must reflect the number of connections and/or ERUs for final build out of the PUD.
  - All wells located within the boundary of the PUD must be decommissioned prior to final PUD approval unless the existing well will be part of the water source and/or supply infrastructure of the water system serving the PUD. Existing wells may be used for a non-potable purpose contingent upon approval by the water system serving the plat and the Health Department. In order for the Health Department to approve the existing well as a non-potable water source, the applicant must demonstrate that 1) the well's construction meets current well sealing standards, 2) does not pose an adverse impact to existing water wells, and 3) does not pose a threat to existing groundwater quality. Additionally, the applicant must demonstrate that water rights exist to meet the proposed use, or demonstrate that the use will meet the water right exemption.

## 6. Binding Site Plan (BSP)

- a. Final Water Supply Approval
  - A valid water availability letter from a public water system that meets the requirements of Section 14.L.5. a. through c. must be submitted to the Health Department as proof of connection to a public water system. The "final" signature line must be signed by the water purveyor.
  - 2) The water availability letter must reflect the number of connections and/or ERUs for final build out of the BSP.

All wells located within the boundary of the BSP must be decommissioned prior to final BSP approval unless the existing well will be part of the water source and/or supply infrastructure of the water system serving the BSP. Existing wells may be used for a non-potable purpose contingent upon approval by the water system serving the plat and the Health Department. In order for the Health Department to approve the existing well as a non-potable water source, the applicant must demonstrate that 1) the well's construction meets current well sealing standards, 2) does not pose an adverse impact to existing water wells, and 3) does not pose a threat to existing groundwater quality. Additionally, the applicant must demonstrate that water rights exist to meet the proposed use, or demonstrate that the use will meet the water right exemption.

### T. Commercial Businesses

All commercial businesses located within a **permanent structure** shall be supplied by a potable source of water, under 30 PSI pressure, from an approved public water system.

# U. Projects

If the Health Department has determined that a land use proposal or group of land use proposals is/are a "Project," as defined herein, then the applicant must meet all water right requirements and water supply limitations pursuant to RCW 90.44 and this chapter.

#### **SECTION 16: Alternate Water Supply Sources**

- A. In order for the Health Department to approve an Alternate Water Source, the following requirements must be met.
  - 1. The source of the water must meet the water quality requirements of this chapter.
  - 2. The amount of water provided by the source must meet the water quantity requirements of this chapter on a year-round basis. The Health Department shall not approve an interruptible water supply source to meet building permit adequacy requirements.
  - 3. The alternate water source must be the only available source of water to the site, property, building, or proposed use. The Health Department shall not approve an alternate water source as a means to meet the water adequacy requirements of this chapter if water is available from a public water system or individual well.
  - 4. Conditions set by the Health Department must be maintained through the life of the alternative water source. Conditions may include but not be limited to regular water quality testing, water use metering, and additional source-protection measures. The applicant shall report the results of the conditions placed on the

alternate water source approval in accordance with a schedule developed by the Health Department.

- 5. Applicants proposing the use of an alternate water supply must submit the appropriate application documents, a variance using the process outlined in Chapter 1 of the Environmental Health Code, and the appropriate fees established by the Board of Health.
- 6. The Health Department may not approve an alternate water source that is proposed to be connected to an existing public water system supply without prior approval of the water system. Approval of the alternate supply by the water system does not guarantee approval of the alternate source by the Health Department. Determination to approve or deny the alternate source shall be made on the basis of the best public health interests.
- 7. Applicants for an alternative water source shall be responsible for submitting all applications, paperwork and fees associated with the Health Department's review process. Fees for an alternative water source shall be that of the well siting fee, and any additional hourly fees accumulated in reviewing the alternative water source and administering ongoing source monitoring. Non-payment of fees shall be deemed reason to deny or revoke Health Department approvals associated with the alternative water source.
- B. The property owner and/or applicant assumes all responsibility for water adequacy requirements should an approved alternate water source fail. In the event of an alternate water source failure, the Health Department may revoke all previously issued permits that rely on an adequate source of water.

#### **SECTION 17: Waivers and Variances**

All waiver and variance requests to these regulations shall be pursuant to the requirements of Chapter 1 (Waivers and Variances), of the Environmental Health Code.

## **SECTION 18: Enforcement**

- A. A notice of violation may be recorded on all properties in violation of, or failing to comply with, any of the provisions of this chapter.
- B. In the event any person violates or fails to comply with the requirements of this chapter or lawful order of the Health Department, the health officer may pursue any of the remedies set forth in this chapter or any of the remedies or penalties set forth in Chapter 1 of the Environmental Health Code.

# **SECTION 19: Appeals**

Any person aggrieved by a decision or final order of the health officer shall have right to appeal such decision or order in accordance with the appeal procedures set forth in Chapter 1 of the Environmental Health Code.

## **SECTION 20: Severability**

The provisions of this Section are hereby declared to be separate and severable, and the invalidity of any clause, sentence, paragraph, subdivision, section, or portion of this chapter or the invalidity of the application thereto to any person or circumstance shall not affect the validity of its application to other persons and circumstances.